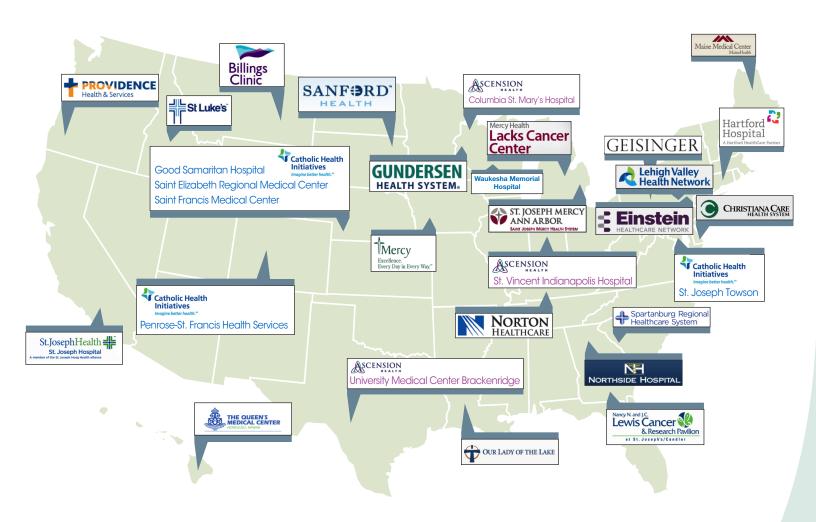
NCCCP Chronicle 2007 - 2014



The National Cancer Institute Community Cancer Centers Program (NCCCP):

Translating Science into Care





This Chronicle is dedicated to the physicians, nurses, staff, and leadership of the hospitals selected to participate in the NCCCP. Because of their commitment to delivering high-quality cancer care and to increasing access to cancer research in their communities, the NCCCP experienced many accomplishments and influenced changes in the larger oncology setting. Without the support of the participating hospitals, work by many individuals at each of the organizations, and the ongoing guidance from the NCCCP Program Advisory Committee and the NCCCP Executive Subcommittee, the NCCCP would not have achieved so much in its seven years as an NCI-sponsored program.

The future is not someplace we are going, but one we are creating.

The paths are not to be found, but made. And the activity of making them changes both the maker and the destination.

- John H. Scharr



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NCCCP Chronicle

Part I

A Brief History
of the Program

2005	NCI begins planning for a community cancer care initiative
2006	'Guiding Coalition' of NCI division representatives begins to conduct internal and external fact finding NCI releases a request-for-information (RFI) Dr. Niederhuber sworn in as NCI Director Leidos Biomedical Research, Inc. (formerly SAIC-Frederick, Inc.) issues a request-for-proposals (RFP) for participation in the NCCCP
2007	NCI forms a NCCCP Program Advisory Committee (NPAC) 8 community hospitals and 2 healthcare systems with hospitals receive research subcontracts to participate in the NCCCP, creating network of 16 hospitals NCCCP Launch/Orientation Meeting NCI awards contract to RTI International for external evaluation of the pilot program
2008	NCCCP Annual Meeting NCCCP affiliated practices begin elective participation in QOPI®
2009	NCCCP Annual Meeting NCCCP hospitals begin participation in RQRS beta test Leidos Biomed issues RFP to add more sites to NCCCP network

Evolving Scientific Landscape Stimulates Change

With the sequencing of the human genome in 2003, the NCI worked to refine and mobilize its research agenda to capitalize on the advent of the cancer genomics era and rapidly advancing technology capabilities. The Institute assessed its relationship with the broader delivery system, considered ways to expand clinical research by gaining greater access to the general population, and envisioned the possibility of transforming care processes to support genomically-informed medicine and improve quality of care in the community setting—where the majority of cancer patients receive their care.

In 2005, Dr. John Niederhuber was appointed Deputy Director of the NCI and he became the Director in 2006. His vision for the NCI included playing a more active role in reconfiguring clinical research and enhancing access to high-quality cancer care in the community setting. The concept for a pilot program was developed to explore the institutional capacity of community hospitals to improve patient care and contribute to the NCI research mission. Dr. Niederhuber believed that the NCI Community Cancer Centers Program (NCCCP) pilot would complement the work and accomplishments of the NCI-designated cancer centers and other various initiatives such as the Community Clinical Oncology Program (CCOP), which had a pioneering role in conducting cancer control and prevention trials in the community setting, and the Cancer Research Network initiative, which focuses on the role of managed care systems in community cancer care.

The NCCCP Concept: A Public—Private Partnership with Project Management Support

The NCCCP was designed with specific focus areas to explore the best methods to enhance access to care, reduce cancer healthcare disparities, improve quality of care, and expand research while addressing the full cancer continuum from prevention, detection, diagnosis, treatment, survivorship and palliative care through end-of-life care. These focus areas—disparities; clinical trials; quality of care; survivorship and palliative care; information technology; and biospecimens-encompassed NCI's commitment to identifying ways to bring the latest scientific advances to community-based locations, strengthening clinical research, and supporting research goals with a network of diverse sites across the country. The NCI knew that the program's ambitious agenda would require significant support from hospital management and clinical teams, making it important to align goals so that the participating organizations would have an incentive to implement initiatives and achieve success.

Establishing the program as a public-private partnership provided a mechanism to leverage federal funding as the NCCCP required co-investment of funds from the selected

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2010	14 new community hospitals receive research subcontracts to participate in NCCCP, network expands to 30 sites with ARRA funding NCCCP Annual Meeting Original 16 hospitals complete white papers
2011	NCCCP Annual Meeting RTI International completes final reports of NCCCP pilot evaluation
2012	Leidos Biomed issues RFP for limited competition to extend NCCCP period of performance Association of Community Cancer Centers publishes the NCCCP Monograph Leidos Biomed awards research subcontracts to 21 community hospitals to extend NCCCP period of performance for 2 more years NCI begins planning for consolidation of community oncology programs NCCCP Annual Meeting
2013	NCI Board of Scientific Advisors approves concept for the new NCI Community Oncology Research Program (NCORP)
2014	NCI shares final report ("Assessing Research Collaborations") of program assessment focused on NCCCP research partnerships NCI announces grant awardees and official launch of NCORP NCCCP formally ends

community hospitals and the commitment of executive leadership; this was an organizational innovation for both the NCI and the participating hospitals. To facilitate the work that would be involved with this collaboration, and because much was unknown about the capacity of the hospitals that would ultimately be selected, the NCI utilized its prime contract with Leidos Biomedical Research, Inc. (formerly SAIC-Frederick, Inc.) to draw upon the company's project planning and management expertise to create a network infrastructure and manage the program.

When the NCCCP pilot RFP was released in late 2006, more than 40 hospitals and health systems submitted proposals. In 2007, Leidos Biomed awarded research subcontracts to 10 organizations, creating a national network of 16 community hospitals in urban, suburban, and rural settings across the country.



The NCI contracted with RTI International to conduct an external evaluation of the three-year pilot, critical to assessing program implementation and NCCCP performance in terms of site development. Based on the evaluation's preliminary findings and with additional funds from the American Recovery and Reinvestment Act (ARRA), the program was extended for another two years. The NCCCP expansion in 2010 added 14 more hospitals that were competitively selected, creating a 30-hospital network.

Soon afterwards, the NCI began planning a reorganization of its community-based research networks (i.e., the NCCCP, the existing CCOP and the Minority-Based CCOP) to create a single network that would build on each program's strengths. In 2012, funding was approved to extend the NCCCP for another two years while the process to develop a new program was formalized. A limited competition among the 30 NCCCP hospitals resulted in a network of 21 hospitals to continue program participation through September 2014, when its successor program, the NCI Community Oncology Research Program (NCORP) was launched.

Program Evaluations

Results from RTI's independent, multi-year evaluation of the program's pilot phase (2007-2010) are publicly available on the NCCCP website (http://ncccp.cancer.gov/ about/reports-and-tools.htm). The evaluation focused on the capacity and progress of the 16 NCCCP hospitals in the 'pilot cohort' as they implemented the overall program and its specific components. A separate assessment, led by Dr. Mary Fennell (Brown University) through an NCI contract, was conducted to examine the development of formal research collaborations between external organizations and the expanded network of NCCCP hospitals (i.e., 30 hospitals: the 16 in the pilot cohort plus the 14 hospitals added in 2010). This assessment focused on the development and range of research collaborations with external partners. The final report is also publicly available on the NCCCP website (http://ncccp.cancer.gov/ files/ARC-report-approved-20140913.pdf).

Shared Governance

The NCCCP participants shaped the program concept according to the NCl's vision, yet the implementation process was different in the varied community and organizational settings. The program's milestones were achieved through the work of many – all the subcommittee members, program advisors, representatives from the advocacy community, and project management support staff – who collaboratively developed tools, analyzed data, and planned strategies to accomplish objectives. The shared governance model of the NCCCP was unique to both the NCl and the participating organizations; it fostered engagement, collaboration, and a culture of mutual support.

The Work of the NCCCP and the Network

From the first day of the NCCCP launch in 2007, participants mobilized into their subcommittee "teams" and the hospital clinicians and staff stepped up to the plate assuming co-chair leadership roles. The goal for shared success was instantly apparent as the subcommittees began to openly discuss process barriers, collectively research problems, develop and adapt tools and resources, and freely share local solutions and failures. The monthly subcommittee calls were the primary platform for these discussions, though collaboration among the hospitals went beyond the scheduled meetings. The cancer centers frequently communicated with each other with 'off-line' or small group calls to discuss common issues and even visited each other to promote mentoring opportunities.

For example, the team at Christiana Care's Helen F. Graham Cancer Center hosted several site visits where other NCCCP hospitals went to Christiana so that the team could share the successes of their multidisciplinary care program with those who wished to learn more. This type of collegial atmosphere was sustained throughout the course of the NCCCP, often taking shape in different ways amid the participating organizations over the years, and is certainly a unique aspect of the program that created a special bond between the NCCCP network hospitals.

Partnerships and Collaborations

The program's extensive 'deliverables' were challenging, yet all of the NCCCP hospitals were committed to improving cancer care and expanding cancer research. A major contributor to overall program success was participation in studies or projects that required multi-site standardized data collection, a difficult task for hospitals within one health system but even more challenging across unrelated organizations. Details about these collaborative efforts are cataloged in the yearly NCCCP Progress Reports (see Appendix II), though several highlights include:

- Participation in the Commission on Cancer's Rapid Quality Reporting System (RQRS) beta test
- Participation in the American Society of Clinical Oncology's (ASCO) Quality Oncology Practice Initiative (QOPI®)
- Collaboration with Memorial Sloan-Kettering Cancer Center for the preliminary validation of the Patient Reported Outcomes Version of the Common Terminology Criteria for Adverse Events (PRO-CTCAE) system
- Collaboration with the University of Maryland to conduct a study on the impact of multidisciplinary care on processes and outcomes of cancer care
- Participation in the American Cancer Society's Patient Reported Symptoms and Side Effects Study
- Collaboration with ASCO and NCI's Center for Biomedical Informatics and Information Technology to produce the Clinical Oncology Requirements for the EHR (CORE) document.

Beyond the NCCCP

Over the NCCCP's seven years, the program made significant contributions to enhancing access to care, improving quality, and expanding research within the participating organizations and their communities. Lessons learned from the NCCCP have been shared with the broader oncology community, allowing many other cancer centers and providers to benefit from program-developed tools and resources.

Many of the program's efforts are expected to lead to improvements in cancer care and research beyond the

NCCCP. As a coalition of community hospitals that had the opportunity to work together on a variety of initiatives, NCCCP developed, tested, and implemented new approaches that will have lasting implications for the participating hospitals. These may translate to the broader community setting as the NCCCP's legacy is shared with other community cancer centers and NCI's new research initiatives. The NCCCP Chronicle attempts to capture highlights from the program's journey and the collective accomplishments of the many individuals and organizations involved in the NCCCP.

NCCCP Engagement: Fostering Collaboration Program Support by the Numbers

- 458 subcommittee calls
- 578 working group calls
- 96 individuals serving as co-chairs
- 301 ARRA project calls
- 39 webinars

- 42 email distribution lists
- 46 listservs
- 1 program launch meeting
- 5 annual meetings
- 1 principal investigators' retreat

NCCCP Chronicle

Part II
The NCCCP
Disparities Focus

Evolution of a Community-based Disparities Program

The problems of access to healthcare, unequal treatment and quality of care, and limited research opportunities for vulnerable and underserved populations continue to be a significant policy concern for federal, state, and local governments. The barriers to addressing these issues are substantial and well documented. For cancer, late-stage diagnosis, delays in treatment, gaps in care, and lack of follow up have led to higher mortality for those experiencing healthcare disparities. Overall, progress has been slow in addressing these issues and solutions are often complex and multi-pronged. Not-for-profit community hospitals are a safety-net in their communities and are a locus for coordinating healthcare services and resources. Against this backdrop, the NCCCP was designed to draw upon this role of community hospitals and work with them to build capacity to more effectively address cancer healthcare disparities.

A Public-Private Partnership

As a public-private partnership with 40% of funding directed at efforts to reduce cancer health disparities, the NCCCP community hospitals and the NCI program staff and advisors had a significant incentive to make efforts as effective as possible. The partnership was a catalyst for making progress as the program's co-investment feature ensured executive management engagement, aligned missions, and supported initiatives. The network's learning collaborative included access to NCI expertise, community-based cancer centers, and external organizations and disparities researchers. The program's focus on addressing the full cancer continuum (as opposed to screening and outreach) and developing partnerships with community-based organizations and disparities researchers, as well as its use of data to inform planning and track progress, were essential to achieving NCCCP's disparities goals. Over the seven year period, the hospitals reported noteworthy progress and significantly changed approaches to addressing disparities. Efforts that were charity and community benefit initiatives added stronger business and mission imperatives with more formal plans, specific focus areas, metrics, and resources.

Building Capacity

The disparities priorities included increasing outreach, cancer screening activities, community partnerships, and patient navigation programs targeted to underserved populations. Building capacity in the disparities domain required commitment, resources, and time. It started with increasing executive, management, and employee knowledge and skills, and included organizing disparities work with a strategic plan, prioritizing activities, allocating appropriate staffing, and evaluating metrics and outcomes. When the NCCCP was established in 2007, the community cancer centers had a paucity of disparities-centric essential building blocks and they had to reexamine the definition of disparities. As noted by one of the site's Administrative Leads, "We serve a rural area but we never thought about defining our most rural patients as underserved. This made a big difference in the way we approached meeting their needs...we became much more intentional."

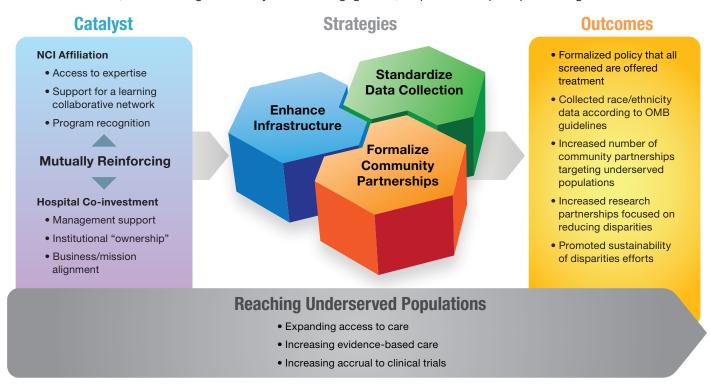
While all the NCCCP hospitals offered charity care, they did not have focused strategies in place to specifically address disparate populations. Race and ethnicity data was not collected in a standardized manner across data systems, health fairs were used as a principal means of reaching minority and underserved populations (rather than ongoing programs), and community advisory groups which bring a critical voice to planning culturally appropriate strategies were infrequently used as resources. Several sites had grant funding for breast and cervical cancer screening programs, which supported mammography vans, but this did not necessarily lead to community engagement.

Leadership support was critical to build the community cancer center capacity to address cancer health disparities. With that support, race and ethnicity data collection ensued, allowing the sites to better understand those they served. Community partnerships were formalized and both parties shared common goals and understood their respective roles and responsibilities. These partnerships raised the level of awareness of the complexity of cancer care in disparate populations. Many sites instituted cultural competency and awareness training for staff and in some cases the trainings were institutionalized across hospital systems. Multidisciplinary care conferences began to take hold, offering a more comprehensive and coordinated approach to care of the underserved. The NCCCP substructure within the cancer centers had a huge impact on their programs overall. Patient navigation was introduced or expanded with many adding "outreach" navigators who were skilled in engaging underserved populations and addressing the range of issues that were barriers for cancer care (e.g., insurance, transportation, child care).

Understanding the Community

Formalizing community partnerships was often more complicated than anticipated. Hospitals are community resources but as institutions they are less skilled at community engagement. Building partnerships involves time and trust, a common vision, and shared goals and endpoints. Carrying out an intervention or building a coalition is far more likely to be successful when informed by the culture of the community and if the roles and relationships of the involved individuals/groups are well defined.

An extremely important part of any community assessment, therefore, is to start by finding out as much about the community as you can—its physical and geographical characteristics, its culture, its government, and its assumptions. The NCCCP hospitals were open to learning new ways to engage with various community groups and changed approaches for addressing disparities. By routinely collecting race and ethnicity data according to OMB guidelines, observing cultural practices, and learning from community members, the NCCCP cancer centers gained increased community understanding and this led to more effective programs. "Community groups started to realize we were going to provide services on an ongoing basis and not from time to time, thus fostering community trust and engagement," explained one principal investigator.



Evidence-based Practices, Interventions, and Metrics

The NCI used several strategies to promote and develop the understanding of what comprised evidence-based practices and interventions. Several presentations on this topic were made at annual meetings and on the Disparities Subcommittee calls. Most of what was presented originated from "Using What Works: Adapting Evidence Programs to Fit Your Needs" (NCI, 2006). An integrated and strategic model for evidence-based practice is necessary to adequately bridge the gap between current practice and evidence supported interventions. Rather than conducting a broad based health fair, the sites were strongly encouraged to select a population and focus on targeted interventions (e.g., mammography screening) with the community. The NCCCP-developed "Template for Community Outreach" served as a guide for planning and implementing focused and effective outreach strategies.

Outcome evaluation was important because it showed how well the NCCCP had met its objectives and allowed for making effective program improvements. Learning how well the NCCCP sites met their objectives was vital for: justifying the program to management; providing evidence of success or the need for additional resources; increasing organizational understanding of and support for disparities programs, and encouraging ongoing cooperative ventures with other organizations. Many developed methods of demonstrating return on investment for investing in disparities resources. Navigators were asked to track data such as when patient navigation helped avoid unnecessary emergency department visits, especially for uninsured patients, or when navigation led to increased use of other hospital services, and when navigation supported clinical trial participation.

Expansion across Program Pillars

The individual NCCCP hospitals collaborated with one another and strengthened their partnerships with the NCI-designated Cancer Centers, the American Society of Clinical Oncology, the American College of Surgeons' Commission on Cancer, and other research programs to improve patient care and provide patients with greater access to research opportunities. As NCCCP matured, hospitals began to focus on disparities across each of the program pillars (i.e., clinical trials, biospecimens, quality of care, information technology, survivorship and palliative care). In addition, they collaborated, shared best practices, visited each other's cancer centers, and developed relationships that will continue long after the NCCCP program has ended. The development of an NCCCP cancer center "network" furthered disparities work in many meaningful ways.

Data-driven System Changes and Community Impact

By the end of the program, the hospitals could look at their disparities work in ways more like other initiatives where rigor, focus and monitoring were required. The hospitals consistently reported that data collection and analysis were important drivers of program planning, community partnerships have been integral to improving patient engagement, cultural competence education training equipped care providers to more effectively close the disparities gap, and the NCCCP's disparities initiatives are being integrated into all aspects of the cancer programs. Focusing efforts so that community impact could be assessed was more effective than organizing health fairs; following vulnerable patients across the continuum enabled the cancer centers to show how they improved access and quality. Data-driven efforts (e.g., collecting patient demographic information, using the 'NCCCP Screening and Accrual Log') to identify barriers to accruing underrepresented populations to clinical trials supported the development of interventions that could increase participation of patients in cancer trials.

Sustainability

Most hospitals have reported that the infrastructure, focused strategies, and partnerships developed during NCCCP participation, and the standardized collection of race and ethnicity data according to OMB guidelines, will be sustained beyond the program's end date. Additionally, the program efforts have started to prepare several organizations for the changing healthcare environment with Accountable Care Organizations and the growth of population health. The new approaches learned through NCCCP have helped the hospitals more effectively fulfill their mission to serve all in the community and have enabled them to show the benefit of the work involved in reducing cancer care disparities.

NCCCP Chronicle

Part III
Highlighting
Accomplishments

All of the NCCCP community hospitals experienced significant transformations and contributed to program accomplishments during NCCCP participation. It is impossible to capture the achievements and changes at each organization, yet the Chronicle aims to share many stories to convey the network's efforts.

The following pages represent illustrative examples of how NCCCP participation positively impacted the care delivery systems and cancer research programs at all of the NCCCP hospitals.

Reducing Disparities for Rural Communities: Addressing Barriers to Access and Quality of Cancer Care

Maine Medical Center's patient population reflects its location in Maine's largest and most diverse city, its status as the largest and primary referral hospital in the state, and its mission to provide healthcare to all Maine residents, regardless of income or health insurance status. Based in Portland, a city with a diverse racial and ethnic population and a Refugee Resettlement Center that has contributed to growing immigrant and refugee communities, the center's patient population includes significant numbers of ethnic and racial minorities.

Adding to the diversity of those served institutionally, nearly half of the center's patients are referred from outside the Portland area because it provides clinical services that are not offered in the many small, isolated, rural communities throughout the state. Over 60% of Maine's 1.3 million residents live in these rural regions, compared to 21% in the US. Maine Medical Center provides health care for a substantial proportion of Maine's underserved rural residents, and plays a critical role in addressing geographic barriers to care throughout the state.

NCCCP funding and program participation strengthened existing community partnerships and facilitated new partnerships focused on serving those experiencing healthcare disparities.

The state's rural and remote coastal communities have been disproportionally impacted by socioeconomic hardship in recent years, in contrast to other urban regions of the state. This has further influenced access to cancer care. Providing high-value cancer care for these disadvantaged groups is part of the center's mission as both a community hospital and the state's largest tertiary center.

NCCCP funding and program participation strengthened existing community partnerships and facilitated new partnerships focused on serving those experiencing healthcare disparities. After selection into the NCCCP, the center conducted a detailed needs assessment and identified a number of barriers, unique to the local underserved populations, that were impacting access to high-quality cancer care. The following are three examples of NCCCP efforts designed to address several of these barriers.

Lack of reliable transportation for socioeconomically disadvantaged patients from remote rural regions of the state: Through an initial private donation and NCCCP directed efforts, the center developed its

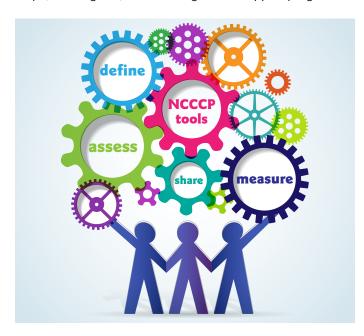
'Passport to Care' program. Administrated through the navigator program, it offers travel stipends in the form of gas cards, bus or train vouchers, access to volunteer drivers, as well as support for local housing and food for low-income, geographically isolated Maine residents. The Passport to Care program has been sustained beyond NCCCP participation in partnership with a number of state and community groups, including the American Cancer Society, and through a combination of grant funding, private donations and an annual fundraiser.

- 2. Geographic barriers to quality cancer genetic counseling services: NCCCP-supported efforts and subsequent foundation support allowed the development of a pilot telegenetics program in partnership with a rural hospital serving remote coastal and island communities. This program has been sustained through ongoing institutional support. Based on the pilot's success, additional support was secured in 2014 from the Maine Cancer Foundation to extend the reach of cancer telegenetic services through a partnership with Maine General Medical Center. Satisfaction and other quality indicators have been high, as measured through a series of pre-/post-surveys.
- Need for culturally appropriate cancer prevention and screening educational resources: The need was identified based on input from community partners. including representatives from local immigrant and refugee communities, as well as representatives of other regional ethnic and racial groups. Through NCCCP seed funding and local foundation support, Maine Medical Center partnered with local Division of Health offices, free clinics, community health workers, volunteers from local immigrant and refugee communities, and other partners to address the educational needs of the area's diverse and growing regional immigrant and refugee populations. Stakeholder input led to creation of a series of cancer prevention and screening educational materials that accommodate low literacy skills, are culturally appropriate, and are available in three languages (Somali, Spanish, and Arabic). These materials were subsequently distributed to local medical facilities, including free clinics, Division of Health offices, and other community partners for ongoing use.

"Each of these programs," explained Susan Miesfeldt, the NCCCP principal investigator for Maine Medical Center, "exemplifies NCCCP's mission of addressing barriers to access and quality cancer care among those with healthcare disparities. They are sustainable reminders of the program's impact at a state and regional level."

Program Tools Add Value beyond NCCCP

When Our Lady of the Lake (OLOL) reviewed the initial NCCCP request-for-proposals, the hospital and its Mary Bird Perkins Cancer Center recognized the program as an opportunity to increase the breadth and depth of knowledge about oncology research and cancer care. After learning of its selection to participate in early 2007, OLOL eagerly awaited the program launch meeting. As the deliverables for NCCCP became clear, the reality of meeting expectations appeared daunting to the recently awarded hospitals. Monthly subcommittee calls among the network revealed that more specific guidance on how to accomplish program objectives would be helpful to all participants. The NCI and the sites worked together to develop tools that would serve as road maps, define goals, focus strategies and support progress.



The NCCCP directed 40% of program efforts toward reducing healthcare disparities and therefore required all sites to increase community engagement and formalize partnerships. Though OLOL had a history of serving its community's disparate populations, the NCCCP significantly improved outreach efforts. For example, OLOL relied heavily on the Template for Community Outreach to focus on patient population needs, assess strategies, and guide development of new initiativessuch as a successful annual screening event—with partner input and support. Using the template allowed OLOL to achieve success through a better understanding of the community, documentation of barriers to reaching target populations, and consideration of appropriate partnerships for specific projects. It also highlighted the need to define objectives, plan activities, and develop metrics to measure progress. Now, all of OLOL's outreach activities are planned with community and partner input and include evaluation metrics.

Increasing patient participation in clinical trials has been a long-standing objective for the NCI that translated into a

program focus area for the NCCCP. In Louisiana, Hurricane Katrina had devastated the region's cancer services and many patients were displaced, unable to continue their treatments or without access to NCI-sponsored clinical trials. The Minority-Based CCOP at Louisiana State University (LSU) was significantly affected with limited access to patients. When OLOL formed a partnership with LSU to help the MB-CCOP meet accrual goals, OLOL's participation in the NCCCP positively influenced the partnership.

Using NCCCP tools such as the Screening and Accrual Log and the Clinical Trials
Best Practice Matrix... helped us see the connection to the crucial elements needed to support our program and provided a way to measure and report progress.

To support the NCCCP's goal of increasing clinical trial accruals—especially among typically underrepresented populations—the Clinical Trials Subcommittee developed resources to help the hospitals meet program objectives. The Clinical Trials Screening and Accrual Log was an early tool to focus accrual efforts and recognize barriers to underserved accrual. OLOL found the tool so helpful that it shared the Log with LSU and their other accrual partners. Now, each of the MB-CCOP's accrual sites use the Log, uniformly capturing data about trial screenings, recruitment barriers, patient demographics, and enrollment data. OLOL reported that using the Log helped to improve understanding of trial enrollment barriers and the critical role of data capture to identifying accrual strategies and tracking progress. These efforts are reflected in OLOL's success as the leading accrual site for the LSU MB-CCOP for the past several years. "Using NCCCP tools such as the Screening and Accrual Log and the Clinical Trials Best Practice Matrix," explained Renea Duffin, the Vice President of Cancer Support and Outreach at the Mary Bird Perkins Cancer Center of OLOL, "helped us see the connection to the crucial elements needed to support our program and provided a way to measure and report progress."

Many NCCCP-developed tools proved beneficial to improving community-based oncology research and care. The process of creating and shaping them was equally beneficial. Working with the other NCCCP hospitals, comparing challenges and strategies, and receiving guidance from the NCI program advisors was a unique opportunity that enhanced OLOL's cancer program. Lessons learned from and tools developed by the NCCCP continue to be valuable. The partnership OLOL forged with LSU to support accruals expanded and led to a coordinated and successful application for NCI's new community initiative, NCORP. The Baton Rouge community now has a larger and stronger cancer program resource for the future.

Increasing Access to Clinical Trials for Rural Patients

Saint Francis Cancer Treatment Center, a member of Catholic Health Initiatives' coordinated regional program for the NCCCP in Nebraska, is located in Grand Island. It was one of the initial 16 pilot sites and remained in the NCCCP for the program's full period of performance, i.e., seven years. The cancer center's NCCCP participation significantly enhanced its involvement in the whole spectrum of clinical trials and related activities.

Joining the NCCCP network in 2007 provided Saint Francis the opportunity and momentum to expand its clinical research infrastructure, increase the number and types of trials it offered, and focus efforts on accruing more patients to clinical trials from typically underrepresented populations.

With its primary service area in central rural Nebraska, the center provides community oncology service to an area stretching from South Dakota to Kansas and west into the Nebraska panhandle. The community-based cancer program has been involved in clinical research since 1996, as an affiliate of University of Nebraska Medical Center and the NCI-designated Eppley Cancer Center. Prior to NCCCP, Saint Francis offered a wide variety of clinical trials to patients, including co-operative group, industry-sponsored, and trials from the University of Nebraska Lymphoma Study Group, Eppley Cancer Center, and CTSU. Joining the NCCCP network in 2007 provided Saint Francis the opportunity and momentum to expand its clinical research infrastructure, increase the number and types of trials it offered, and focus efforts on accruing more patients to clinical trials from typically underrepresented populations.

Saint Francis recently gathered its clinical trial activities data for a five-year period immediately prior to joining the NCCCP and compared it to data covering the first five years (2007-2012) of participating in the NCCCP. Data included number and percentage of patients on clinical trials, number and type of available clinical trials, percentage of underserved patients on clinical trials, staffing, collection and storage of tissue samples, organizational infrastructure and linkage to NCI-

designated cancer centers, and availability of new cancer care services. The comparison revealed:

- The average yearly clinical trial participation rate increased from 3.2% to 23%.
- Availability of non-treatment clinical trials (i.e., prevention, supportive care, quality of life, and cancer care delivery trials), increased from an average of 3 per year to 12 per year, and availability of treatment trials increased from 8 per year to 28 per year.
- Clinical trial staffing increased from an average of 1.2 to 3.9 FTEs.
- Two nurse navigators and genetic counselors, one smoking cessation counselor, and one outreach project coordinator were hired.
- Collection and storage of tissue samples increased from 19% to 52%.
- Affiliation with NCI-designated Eppley Cancer Institute enhanced linkages to other NCI programs.

"Participation in NCCCP," remarked Dr. Mehmet Copur, the medical director of oncology at Saint Francis, "had a great impact on our clinical trial and related activities. We had unprecedented and enhanced access to expanded types of clinical trials and developed a wide spectrum of cancer care services. Working with the NCI and the network sites as a learning collaborative, our cancer program significantly benefited from NCCCP. We have met the program's objectives of enhancing access, improving quality, and expanding research in the community setting."



A Nebraska lymphoma patient who was able to participate in a clinical trial at Saint Francis Medical Center.

Navigation: A New Resource to Increase Accrual to Clinical Trials

When Spartanburg Regional became an NCCCP site in 2007, it was already trying to enhance its disease-site navigation program which used a multidisciplinary care conference (MDC) model with nurse navigators supporting breast and lung cancer programs. NCCCP prompted a more focused look at the navigation program through assessment requirements and through patient navigators' participation in monthly working group calls with navigators from other NCCCP sites that reviewed program activities, job descriptions, best practices, challenges and successes. Program funding also supported hiring navigators for additional cancer types.

When the NCCCP developed a demonstration project in 2010 to determine the feasibility of integrating navigators with clinical research teams to increase clinical trial accruals, Spartanburg volunteered to participate. At the time, the site's navigators did not see research support as part of their role and the clinical research nurses were not aware of and did not recognize the potential value of a navigator's support in increasing clinical trial accruals. The NCCCP's focus on quality of care and clinical trials, combined with the demonstration project, led Spartanburg to prioritize accrual efforts. A plan was put in place to require that every patient discussed at each disease-specific MDC be screened for an available clinical trial and the navigator's role increased to include educating patients about clinical trials, referring appropriate patients, and tracking the interventions aimed at addressing barriers to clinical trial enrollment.

Spartanburg began to pair each navigator with a disease-site research nurse. The navigators attended investigator meetings; monthly research-navigator staff meetings were established. It took nearly a year for the research staff and navigators to embrace the new model and roles. Becoming more informed about clinical trials and the importance of providing clinical trial education to patients helped the navigators become very engaged in the process. Once research staff was partnered with navigators, they were able to identify ways in which the navigators could benefit accrual and realized the value of the navigator's role.

Now, clinical research staff and navigators work hand-in-hand to review every new cancer patient for a clinical trial. The nurse navigators receive education regarding the cancer type they navigate and the relevant clinical trials. The navigators are responsible for addressing accrual barriers, such as transportation, access to screening, and trial education. "Working closely with the research team," explained Lucy Gansauer - NCCCP director at Spartanburg's Gibbs Cancer Center, "allows the navigators to best address issues that impact eligibility and several nurse navigators have become quite comfortable pre-screening patients for eligibility, including



A research nurse and patient navigator review patient cases and clinical trial options.

looking at the stage and molecular markers, following evidence-based guidelines, and educating patients about clinical trials as a potential treatment option."

The navigators also coordinate referrals to primary care physicians and specialists for management of co-morbid conditions, promoting greater capacity to coordinate care and improving opportunities for clinical trial enrollment.

Spartanburg attributes the successful integration of the navigation program and the research department to an 11% increase in the number of overall clinical trial accruals in 2012.

NCCCP participation and work over the course of the NCCCP Patient Navigation Project were catalysts to the evolving role of Spartanburg's navigators and their integration with the clinical research team. Requiring navigators to become actively involved with clinical trial accrual was a paradigm shift for the cancer center. The process was complex and took the commitment of leadership to encourage increased interactions between two traditionally separate departments.

Although the process took time, Spartanburg attributes the successful integration of the navigation program and the research department to an 11% increase in the number of overall clinical trial accruals in 2012.

Adapted from "The NCCCP Patient Navigation Project: Using Patient Navigators to Enhance Clinical Trial Education and Promote Accrual," D. St Germain, E. Dimond, K. Olesen, L. Gansauer, et al. Oncology Issues 29(3): 44-53, 2014.

National Benchmarking Partnership and Collaboration Improves Quality of Care

When Sanford USD Medical Center joined the NCCCP in 2007, the cancer center was the leader in cancer treatment, education and research for the Sioux Falls, SD region which covers a service area that incorporates a population of more than 1,200,000 residents. With a well-established cancer program, the center's commitment to quality of care was extensive and included following ASCO's Clinical Practice Guidelines and using a medical staff credentialing process to support a culture of quality with its employed and private practice physicians.

NCCCP participation took this commitment to a new level as the program requirements led to development of more standardized care practices, increased use of evidence-based guidelines, enhancement of multidisciplinary care teams, implementation of Medical Staff Conditions of Participation for the cancer center, and participation in collaborative quality improvement projects and the American College of Surgeons Rapid Quality Reporting System (RQRS). Additionally, the NCCCP's objective to conduct network-wide studies on measurable improvements in quality of care helped the site advance its timeline for pursuing ASCO's Quality Oncology Practice Initiative (QOPI®) certification for its outpatient hematology-oncology practice. While the NCCCP goals aligned well with the cancer program's vision, the program 'deliverables' were the driving force for "stimulating and supporting the QOPI conversation with physicians," explained Thomas Asfeldt, the NCCCP principal investigator.

The entire oncology suite—physicians, nurses, staff—actively supported the measurement objectives of QOPI and the quality improvement goals of NCCCP. The

Improved
Quality
Best
Practices
Quality
Metrics
Benchmarking
Learning
Collaborative
Evidence-based
Guidelines

oncology practice physicians began to participate in QOPI and quickly realized the benefits gained by having abstracted data returned in a measurable format. By 2009, Sanford Hematology & Oncology became the second practice in the nation and the first and only one in South Dakota to receive QOPI certification—a significant achievement.

As part of the NCCCP network's learning collaborative model, the NCCCP sites routinely held Quality of Care Subcommittee calls where they reviewed QOPI data, discussed areas of deficiency, and collectively identified and shared best practices, policies and procedures to target improvements. This led to many transformations at Sanford, particularly in the development of its oral chemotherapy pharmacy program that utilized QOPI measures to develop the process.

While the NCCCP goals aligned well with the cancer program's vision, the program 'deliverables' were the driving force for "stimulating and supporting the QOPI conversation with physicians," explained Thomas Asfeldt, the NCCCP principal investigator.

The defined program involves a multidisciplinary collaboration with standardized work flows that include policies and procedures for clinical staff training and education, early identification of oral chemotherapy patients, obtaining and documenting informed consent, assessing and addressing psychosocial concerns, standardized monitoring, and a documented treatment plan that is entered into the electronic medical record (EMR). The pharmacy reviews the plan in the EMR, confirms if lab orders and/or authorizations are necessary prior to refills, and schedules a medication therapy management visit to review and discuss side effects, missed doses and follow up plans. The EMR is also used as a communication tool with the nurses and physicians involved in a patient's care.

The multidisciplinary approach to prescribing and monitoring oral chemotherapy helps to address barriers to patient adherence. Additionally, the standardized procedures for reviewing and verifying compliance include protocols for following-up with patients who miss office visits and/or treatments. Issues that may impact patient outcomes are identified sooner, leading to improved outcomes. An on-site QOPI visit in the fall of 2013 identified Sanford's oral chemotherapy program as a best practice by the QOPI Surveyors to share with other organizations.

Enhancing Multidisciplinary Care: A Key Driver of Quality

Multidisciplinary care existed at the Lehigh Valley Health Network since 2002. At that time, there were five weekly tumor boards, covering breast, colorectal, lung and genitourinary malignancies, along with a general tumor board that served as a didactic discussion on other malignancies. With the exception of the breast cancer tumor board, the cases presented were generally retrospective case reviews. The initial "team" participating in the meetings included the appropriate surgeon, medical oncology with a special interest in the particular malignancy, radiation oncology, pathology, diagnostic radiology and ancillary physicians as needed.

Lehigh also found that discussion of MDC assessment and goal setting on the Quality of Care Subcommittee calls helped promote change as they learned how other NCCCP sites were tackling barriers such as physician engagement and limited resources to expand MDC initiatives.

The NCCCP defined multidisciplinary care as prospective and collaborative care based on national treatment guidelines. When Lehigh joined the NCCCP in 2010, all sites were expected to increase the number of multidisciplinary care conferences (MDCs) and improve integration of MDC programs. To assist in the process, the sites used the NCCCP-developed MDC Self-Assessment Tool to measure and guide program development. While a relatively strong infrastructure to conduct MDCs existed at Lehigh, there was only a GU second opinion MDC in place. Several improvement areas were identified to enhance support for MDCs. For example, Lehigh ensured that all participating physicians signed the 'NCCCP Conditions of Participation' through the Medical Staff Office, which helped to promote greater physician engagement—from multiple specialties—in the treatment management process. Other efforts included hiring bilingual support staff for multidisciplinary clinics and increasing availability of support services such as genetic counselors, dieticians, social workers, and financial counselors. Nurse navigators were assigned as coordinators for the clinics. Clinical pathways were developed to guide the care decisions in some of the clinics.

Lehigh also found that discussion of MDC assessment and goal setting on the Quality of Care Subcommittee calls helped promote change as they learned how other NCCCP sites were tackling barriers such as physician engagement and limited resources to expand MDC initiatives. Over the past few years, the MDC program



at Lehigh has matured; more cases are presented prospectively, additional disease-specific MDCs have been created, all patients seen in MDCs are reviewed for participation in clinical trials, and the large Hispanic population in the hospital's area is better served through assignment of a Spanish-speaking navigator. As the clinics have matured, additional services have been added as indicated. For example, palliative medicine and pulmonary rehabilitation joined the lung cancer MDC. Plans are underway to begin a melanoma MDC and expand access to the thoracic MDC; additionally, with the ongoing program expansion, Lehigh anticipates tying its many tumor boards to cases seen in the MDC.

All practices within the Lehigh Cancer Center utilize MOSAIQ as the oncology-based electronic medical record. With the exception of the thoracic surgeon, pulmonologist (thoracic MDC) and urologic oncologist MDC, all patient activity is recorded and billed through MOSAIQ. The health network will be moving to EPIC in February 2015, thereby improving connection between all participating physicians in the MDC.

Dr. Eliot Friedman, a Lehigh physician who co-chaired the NCCCP Quality of Care Subcommittee, summarized the hospital's experience and future objectives when he said, "My goal is to make coordinated multidisciplinary care our standard of care. We have demonstrated improved access to care, more complete staging and increased concordance to clinical pathways for our patients with stage III non-small cell lung cancer who are seen in the thoracic MDC. Our greatest obstacle remains proving economic sustainability of the MDCs. However, we feel that by increasing the volume of patients seen in the various MDCs, there will be enough 'billable' services for each participating physician to justify their participation."

Improving Psychosocial Care through the Collaborative Power of the NCCCP Network

The Psychosocial Working Group within the Survivorship & Palliative Care Subcommittee represents an excellent example of the collaborative power of the NCCCP network. Co-chaired by Dr. Mary Helen Davis (Norton Cancer Institute) and Tamara Griess Robinson (CHI-St. Elizabeth) and guided by NCI advisors, the working group was instrumental in helping NCCCP sites expand their supportive services to cancer survivors—an area historically difficult to develop for community hospital-based cancer centers.

"The NCCCP," explained Dr. Davis "gave all the participating sites something to get excited about in terms of developing and improving capacity to deliver high-quality psychosocial care programs. It provided the vision necessary to help the cancer centers set priorities and created a 'how-to' roadmap for program development."

These working group co-chairs fostered an educational environment through regular meetings that included representation from each of the NCCCP sites—often from several disciplines (e.g., nursing, psychology, medical oncology). The meetings were a venue for sharing presentations on best practices and discussing unique program attributes at individual sites; hosting guest speakers from external organizations (e.g., the National Council for Community Behavioral Healthcare, the Schwartz Center for Compassionate Healthcare, the Center for Healthcare Management Studies within the Department of Defense); discussing key take-away messages from national conferences (e.g., American Academy of Hospice and Palliative Medicine, the American Psychosocial Society); reviewing site-level scores on the NCCCP-developed Psychosocial Care Assessment Tool; and discussing guidelines from the Institute of Medicine and future Commission on Cancer (CoC) program standards.

The network collaborations... helped the NCCCP hospitals 'move the needle forward' with program development and also provided insight to the research organizations studying the science and practice of psychosocial care.

These activities stimulated conversations at the local level among care providers, physicians, and administration that helped to garner resource support for expanding psychosocial care programs. Additionally, using the NCCCP self-assessment tool allowed sites to understand the critical components of a high-quality program, evaluate their capacity to provide psychosocial care, and measure progress with enhancement efforts. Sites with higher 'scores' on the tool presented information

to the working group about specific services (e.g., skills training, distress screening instruments, patient-family communication practices) that allowed them to report higher performance levels on the self-assessment tool. Reviewing data on tool scores served as a benchmarking opportunity and provided a useful means to identify areas that could be improved to advance program capacity and refine care delivery. The co-chairs coordinated more specific mentoring opportunities by pairing sites around their selected areas of program growth with sites who had rated themselves high in that particular care component area—providing a unique environment beyond internally focused improvement efforts to benefit all of the NCCCP community cancer centers.

Dr. Davis recently remarked that "Norton Cancer Institute has changed due to NCCCP" and she attributed much of that change to the learning collaborative model employed by the network of participating hospitals, program advisors, and project management support staff. Other NCCCP sites have reported similar expressions with relationship to their progress in developing psychosocial care programs. For Norton Cancer Institute in particular, program funding supported the hiring of a survivorship nurse navigator who helped with many of the local initiatives. Now, all staff are trained in the administration of the National Comprehensive Cancer Network's (NCCN) Distress Thermometer, a tool to measure distress levels in cancer patients. The site also reports that every patient is screened with standardized tools (e.g., the NCCN Thermometer, the Center for Epidemiologic Studies Depression Scale) at every visit to the oncology clinic. Patients with abnormal distress screening results are referred to behavioral oncology where services include but are not limited to neuropsychological testing, and alcohol/substance abuse screening. Additionally, all cases presented at cancer tumor boards are assessed for psychosocial needs and palliative care concerns.

By routinely discussing trends in healthcare, jointly reviewing practices and processes at all of the NCCCP cancer centers, and comparing experiences to help address barriers and understand successes, the sites have been able to prepare for future expectations with CoC program standards and enhance their delivery of patient-centered care. "The network collaborations," said Dr. Davis "helped the NCCCP hospitals 'move the needle forward' with program development and also provided insight to the research organizations studying the science and practice of psychosocial care. The guest speakers who presented topics to our working group were grateful for the open discussion forums with a group of community cancer centers as it allowed them to 'get out of the ivory tower and into the field.' The NCCCP Psychosocial Working Group created a win-win situation for all participants."

Building a Biobank

The Queen's Medical Center in Honolulu began planning for a biorepository many years ago, as it aligned with the hospital's mission and vision of performing clinical research to better serve the many different ethnicities in Hawaii. Because of the unique ethnic distribution of cancer patients served by Queen's—about 26% Caucasian, 25% Japanese, 16% Filipino, 14% Native Hawaiian, 9% Chinese, 6% Pacific Islander, and 3% Korean—a biorepository based at Queen's could expand opportunities for researchers to examine ethnic differences in cancer.

It was not until Queen's was selected to participate in the NCCCP program in 2010 that the biobank became a reality. The executive administration and Board of Trustees fully embraced the development of a biobank and leveraged the NCI funding to support NCCCP initiatives, especially related to the Biospecimens Subcommittee, to invest in the necessary resources. Program participation quickly demonstrated the critical value of biospecimens to molecular research and the capacity of community hospitals to contribute to this effort.

Under the vision and strategic planning of pathologist Dr. Peter Bryant-Greenwood and with guidance from NCI technical advisors, information exchange among the NCCCP hospitals and efforts to implement NCI Best Practices for Biospecimen Resources, the Queen's biobank was built on the foundation of quality tissue procurement. Protocols have been established to ensure that: frozen section blocks are created using a section of tumor and normal tissue, biorepository staff will prepare the H&E slides, and that each case is reviewed by a pathologist to confirm presence and percentage of tumor, as well as percentage of necrosis to verify if an adequate sample is available for the biorepository. Additionally, the biorepository staff now collects warm ischemia time and cold ischemia time when available.

Future protocols are being designed to further advance capacities of the biobank to support molecular research efforts. For example, these protocols will address the detection of tissue degradation after loss of blood supply, extraction of DNA, RNA and protein frozen section blocks, and creation of tumor expression profiles.

Queen's is very proud of the biobank consent process, which was based on advice from bioethicists and from research conducted by 'Imi Hale Native Hawaiian Cancer Network, an NCI-funded Community Network Program Center. The hospital's NCCCP participation provided strategic opportunities to research and develop patient-sensitive protocols for biospecimen donations that are respectful of the cultural preferences of Hawaii's diverse ethnic groups, particularly Native Hawaiians. As a result of this collaboration, Queen's developed a biobank consent



process that is postoperative and allows for patients to provide either blanket consent for future research or to choose to be re-consented each time their tissue is requested for a research study.

When the Queen's Medical Center was selected to participate in the NCCCP program, the dream of having a biorepository became a reality. The foundation of the infrastructure provided by the NCCCP Biospecimens Subcommittee and the NCI Best Practices, along with the collaborative interactions with the other NCCCP hospitals and newly formed research partnerships, provided the architecture to build a successful biorepository.

A collaboration with the University of Hawaii has yielded many translational research opportunities with the biorepository and the molecular genomics lab, which include a contract with the Mayo clinic for genomics testing, a test which was patented at Queen's.

When the Queen's Medical Center was selected to participate in the NCCCP program, the dream of having a biorepository became a reality. The foundation of the infrastructure provided by the NCCCP Biospecimens Subcommittee and the NCI Best Practices, along with the collaborative interactions with the other NCCCP hospitals and newly formed research partnerships, provided the architecture to build a successful biorepository. The executive administration and the Board of Trustees of Queen's has wholeheartedly supported the BioBank, to expand translational research and to collaborate with the University of Hawaii and other site's basic scientists to expand oncologic research.

Contributing to Molecular Research

NCCCP was a catalyst for improving the level of performance, expectation and compliance of Einstein's biospecimen/laboratory and pathology programs. Participation in NCCCP, with pillar goals and expectations clearly outlined, provided the pathology department with the authority and leverage to enforce guidelines for biospecimen procurement and management. Surgeons came to understand the importance of ischemic time and assuring prompt, careful and meticulous tissue processing. Processes that raised the bar became the standard of care at Einstein as a result of NCCCP. Using NCCCP-developed tools such as the GAFAT (Gap-And-Fill-Assessment-Tool), based on NCI Best Practices, provided a structured means to inventory capacity, identify gaps and ascertain the tools to fill those gaps.

Over the course of participation in the NCCCP, close relationships developed between pathologists and the surgeon "champions" of biospecimen collection and processing. The NCCCP fostered a level of cooperation and activity among surgery and pathology that exceeded the normal boundaries of each department. These relationships ultimately allowed Einstein to successfully submit a proposal for funding in The Cancer Genome Atlas (TCGA) program. Through the NCCCP work, the site could demonstrate that it was fully compliant with tissue collection and storage guidelines for TCGA participation. A -80° freezer was already onsite, a requirement for consideration of potential TCGA tissue source sites.

"Our positive experience with NCCCP," said Christopher Minnick, the cancer center administrator at Einstein,

"and demonstrated success with TCGA facilitated the acceptance of our proposal to the Clinical Proteomic Tumor Analysis Consortium, NCl's comprehensive effort to create an evidence-based efficient proteomics pipeline, leverage TCGA data, and accelerate the ability to move biomarker candidates from discovery to clinical validation. The consortium is composed of Proteome Characterization Centers, a Data Center and a Resource Center to produce a unique continuum that defines the proteins translated from cancer genomes."

Einstein's infrastructure was in place based on enhancements made during NCCCP, the surgeons were educated and sensitized to the importance of participating in molecular research, and joining the CPTAC initiative became the logical next step to further expand cancer research efforts.

The NCCCP successfully prepared and fortified this community hospital-based cancer center for the new era of genomic medicine and cancer care delivery.

"The shared communication with NCI, other NCCCP sites, and mentors providing guidance has been invaluable to our journey," concluded Minnick. "The NCCCP successfully prepared and fortified this community hospital-based cancer center for the new era of genomic medicine and cancer care delivery."



Spreading the NCCCP Framework and Program Initiatives across a System

Catholic Health Initiatives (CHI) is a multi-state national health system that includes 93 hospitals and 37 cancer centers across diverse geographic and market settings. When CHI joined the NCCCP in 2007, five of its community hospitals were included for program participation. At the time, CHI was moving from a holding company model to an operating model with more engagement in promoting and managing system-wide initiatives. The concept of developing national service lines was under discussion although cancer was not the top choice. When the NCCCP RFP was released, CHI seized the opportunity for a multi-site cancer program with the thought that it could be the catalyst for their first national service line.

Our experience over the last seven years has not only transformed our cancer program but has catapulted the Oncology Service Line into being a leader and model for all the other service lines within the CHI organization.

Through the NCCCP, CHI experienced the structure of working within a cohesive network—where the hospitals participated in monthly subcommittee calls that served as venues for ongoing communications, best practice sharing, assessment tool development, and strategic focus sessions to help address program requirements. Immediately recognizing the value of collaboration, the ability of varied institutions to work together toward common goals, and the positive interactions between the five CHI NCCCP hospitals that previously functioned in silos, the system used the NCCCP model as a means to organize and replicate a more effective framework.

Several program initiatives have been translated across CHI, beyond the six NCCCP hospitals (another CHI hospital joined the program during the 2010 network expansion). For example, the requirement to track race and ethnicity data according to OMB guidelines led to an IT project piloted in the CHI-NCCCP hospitals. Data fields were added to patient registration and electronic health record software to capture the information in a standardized manner. Recognizing the value of this data to program analysis, outreach departments, patient navigation, and the Mission and Ministry Fund, and after the pilot's success, CHI rolled the same data collection procedures out to all of their hospital and physician practices.

Another example of NCCCP's influence is with the development of multidisciplinary care conferences

(MDCs). Prior to joining the program, there was a wide range of approaches to case planning—from mostly retrospective tumor board discussions to prospective treatment planning conferences, the NCCCP's definition of MDC. Lessons learned from the Quality of Care Subcommittee and the NCCCP MDC Assessment Tool have been shared with all of the CHI hospitals. Now, every site in the CHI system has at least one MDC and there is an MDC workgroup that meets monthly to present best practices and work on the creation of a resource guide.

Perhaps CHI's most transformative change has been the development of the National Oncology Service Line (NOSL). The NCCCP framework guided its purpose, methodology, and development. Using focus areas based on the NCCCP pillars, creating a network model, and collaborating to share best practices and challenges were cultural shifts for CHI and instrumental to the service line launch in 2009. NOSL links cancer treatment centers across the country to provide patient-centered, integrated health services to cancer patients. Peggy McKinney, the NCCCP Project Lead for CHI, recently remarked on the system's NCCCP journey with this reflection: "Our experience over the last seven years has not only transformed our cancer program but has catapulted the Oncology Service Line into being a leader and model for all the other service lines within the CHI organization." The system created a Cardiovascular Service Line in 2012 and an Orthopedic Service Line in 2013; and, true to the NCCCP model, the leaders of all three lines meet regularly to share best practices, discuss challenges, and discover opportunities.



Expanding Information Technology, Collaborating on Solutions

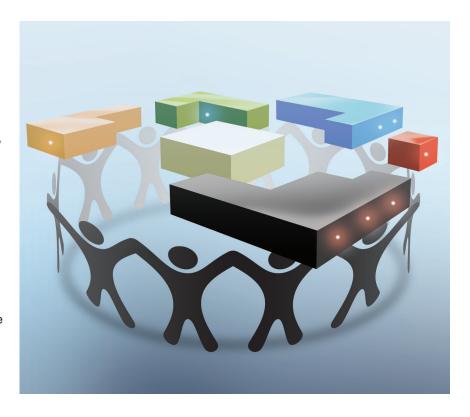
The NCCCP was launched during a time of rapid advancements in biomedical technology and healthcare data exchange, making Information Technology (IT) a foundational component of the program. The IT pillar was a cross-cutting program component in support of all NCCCP subcommittee activities. At program outset, there were three common threads across the sites:

- Disparate technology systems limited information exchange and technology expansion due to costly and complex custom interfacing;
- Cancer Center technology support was somewhat removed from the hospital organizations and cancer programs, making it difficult to manage long-range goals and achieve budget needs for expansion; and
- There was limited availability of technology to support the specialized needs of oncology.

NCCCP sites organized early to address common concerns through monthly "operational excellence" discussions where best practices were shared, national speakers discussed issues and trends, and improvement goals were established. These goals, which went well beyond contract deliverables, were ultimately supported by management as necessary to promote rapid expansion and to support growth of cancer care delivery infrastructure. Federal level Meaningful Use requirements, unfolding at the same time, served to further tax hospital budgets and manpower support.

To create a roadmap for the sites, the NCI developed a Technology Tracker spreadsheet to record progress towards contract deliverables, organizational goals, and collaboration activities (i.e., data sharing). Sites reported specific technology systems, product version, number of staff supported, interfaces, and deployment configurations. Twice a year sites would update the Tracker and engage in leadership calls with NCI advisors to review progress. Once complete, the comprehensive document was shared with all sites to promote network collaboration and drive subcommittee priorities.

The Technology Tracker facilitated efforts to organize according to like-products. Sites discovered leverage with product vendors when they approached them as a group



rather than single organizational requests. Historically vendors roll out enhancements based on customer requests. The subcommittee worked to document domain needs and then further defined those needs according to the product-specific functionality. These like-product groups engaged with other organizations with similar products and requirements to accelerate changes in oncology-based products.

Sites used the Technology Tracker to promote networking when evaluating products for acquisition. The Tracker allowed sites to identify other network sites that had the technology in place and thereby leverage lessons learned and inform their product deployment strategy - one of the most prized benefits for site engagement.

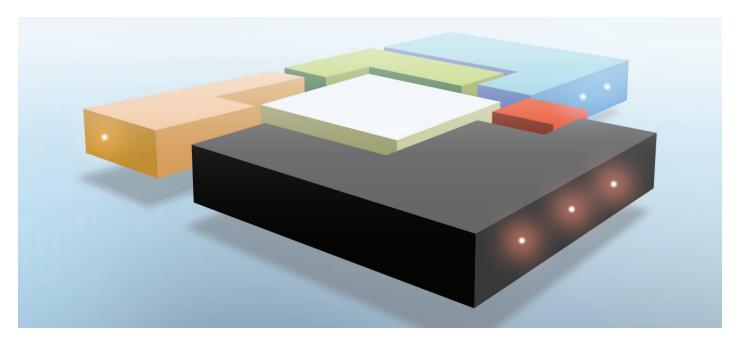
The NCI's caBIG exposed sites to open source technology development and the network of support available through that resource—the large national technology network working on the same oncology capacity issues that concerned them. It gave them a voice in national discussions about the changing landscape of health information technology. Sites engaged in detailed caBIG product and strategy evaluations, measuring solutions with both the needs of the organization and the cost of technology ownership. In some cases NCI products were adopted to support technology needs

at a lower investment point while other sites chose to leverage commercial vendor solutions to better meet their needs. Sites reported that the process of product and service evaluation led to a much clearer understanding of the needs of their organization and exposed them to innovative implementation strategies that were supported by management. It also exposed them to national technology agendas, encouraging engagement and allowing them to help shape the coming national regulations.

Another key concern was the lack of Electronic Health Record (EHR) products that could support the specialized field of oncology. EHR solutions were almost exclusively developed to meet the needs of other healthcare specialties and were at times adapted to an extent to meet the needs of oncology. These vendor adaptations, however, lacked the specialized fields and the algorithmically derived data necessary to support oncology care. NCCCP sites partnered with ASCO to document the unique requirements and use cases for oncology and then worked with the vendor community to drive change by publishing their collective work in the Community Oncology Requirements for EHR's (CORE) and a subsequent white paper in Oncology Issues. This work later informed the Certification Commission for Healthcare Information Technology (CCHIT) effort to augment existing certification requirements for EHR products with the specialized requirements for oncology and led to rapid improvements in oncology modules with development and testing done, in many cases, in partnership with NCCCP sites.

Parallel work addressed strategies to improve a wide range of operational best practices for IT that would address standards to reduce implementation times, reduce budget, and address disparate technology stables. In an effort to build relationships, improve communication, and promote a deeper understanding of technology needs early in planning phases, NCCCP hospital technology staff began to embed themselves in the culture of the departments they serve through attendance at staff meetings and engagement in all NCCCP subcommittees. Sites began to adapt their technology to address new cancer program needs (e.g., patient treatment summaries, navigation modules) or incorporate tools developed by the NCCCP (e.g., Clinical Trials Screening & Accrual Log); local solutions were shared among the network sites. This engagement also led to early intervention in technology planning, giving rise to cross-department collaborations on technology acquisitions that resulted in lower costs, successful technology deployments, and also promoted administration support for future IT needs.

Throughout the program, sites reported that engagement in NCCCP IT efforts led to an enhanced understanding of organizational needs in technology expansion and improved the capability and resources required to enable advanced HIT agendas. Experiences in building capacity and lessons learned from the engagement of the community cancer centers in these evaluations are described in the September/October 2011 Oncology Issues article and have helped to inform other communitybased cancer centers about key learnings of NCCCP sites. Technology expansion was a critical enabler for building capacity to support cancer care and research and has demonstrated that community hospitals can offer coordinated evidence-based care, expand research and provide targeted, molecularly informed precision medicine in the community-based oncology setting.



NCCCP Chronicle



THE NCCCP COMMUNITY HOSPITALS

Ascension Health System Community Hospitals



Ascension Health, the largest Catholic, not-for-profit health system in the United States, joined the NCCCP pilot as a system organization with three hospitals participating in the program. St. Vincent in Indiana served as the lead site for the two developing Ascension sites in Texas and Wisconsin.

NCCCP Subcontract PI: Michael Wiemann (2007–2009), Richard Freeman (2009–2012)

University Medical Center Brackenridge Seton Family of Hospitals

Shivers Cancer Center Austin. TX

NCCCP participant: 2007-2012

PI: John Brindley (2007–2010), Rob Fuller (2010–2012)

University Medical Center Brackenridge is part of the Seton Healthcare Family, a provider of healthcare services in Central Texas. Through its Shivers Cancer Center, the hospital offers a continuum of cancer services. University Medical Center Brackenridge houses the Seton Family clinical research program and Seton's only Internal Review Board (IRB) focusing on cancer-related studies.

Columbia St. Mary's Hospital

Columbia St. Mary's Cancer Center

Milwaukee, WI

NCCCP participant: 2007–2012

PI: Carl Olson (2007–2010), Craig Schulz (2010–2012)

Columbia St. Mary's is comprised of four hospitals and 30 clinics that serve patients throughout Southeastern Wisconsin. The Cancer Center on the Milwaukee campus brings together cancer services offered through the other system hospitals. These hospitals share information technology and electronic health records, and have a single cancer registry providing services to each facility. The patient service area covers metropolitan Milwaukee area, where more than a quarter of residents fall below the poverty level and there is a growing Hispanic population.

St. Vincent Indianapolis Hospital

St. Vincent Oncology Center Indianapolis, IN

NCCCP participant: 2007-2012

PI: Richard Freeman

St. Vincent Indianapolis Hospital is a major referral center for cancer care throughout Indiana. It reaches out to nearby communities through St. Vincent Health, the regional system of 16 hospitals of which it is a founding member. The service area spans over 45 urban, suburban, and rural counties in central Indiana, making it the state's largest hospital system. The oncology network extends throughout central Indiana to provide on-site care to patients in all St. Vincent Health system facilities as well as at facilities that have no affiliation with the system.

CHI System Community Hospitals



Imagine better health.5M

Catholic Health Initiatives (CHI) is a national, nonprofit health corporation that includes hospitals, long-term care facilities, and community-based health organizations across the country. Five CHI sites joined the NCCCP pilot to form a coordinated approach to cancer care across the system, with a group of three rural 'development' sites in Nebraska working as a regional network and two of the system's more advanced community hospital programs, in Colorado and Maryland, functioning as 'lead' sites.

NCCCP Subcontract PI: Mark Krasna (2007–2011), Richard Deming (2011–2012), Dax Kurbegov (2012–2014)

Good Samaritan Hospital

Good Samaritan Cancer Center Kearnev. NE

NCCCP participant: 2007-2014

PI: George Bascom

Good Samaritan participated in the NCCCP as part of a coordinated regional program with three CHI hospitals in Nebraska. Serving nearly 350,000 people in central Nebraska and northern Kansas, the hospital covers a

region that encompasses many counties designated as health professional shortage areas and medically underserved areas. The rural communities of Kearney have higher incidence of cancer than other parts of the state and Good Samaritan has formal partnerships with several community health organizations to conduct cancer screening events around the region.

Penrose-St. Francis Health Services

Penrose Cancer Center Colorado Springs, CO

NCCCP participant: 2007-2014

PI: James Young

Penrose-St. Francis Health Services is an acute care facility in Colorado Springs which includes Penrose Hospital and St. Francis Medical Center. Located 70 miles south of Denver, the city has nearly 600,000 residents. In addition to the largely suburban, increasingly diverse population of Colorado Springs, the hospital serves patients in the 2,000 square miles of rural area to the west, east, and south. The Penrose Cancer Center is located in a designated health professional shortage area in primary care for its low-income populations where one in five people are uninsured.

Saint Elizabeth Regional Medical Center

St. Elizabeth Cancer Center

Lincoln, NE

NCCCP participant: 2007-2014

PI: Kevin Yiee

Saint Elizabeth participated in the NCCCP as part of a coordinated regional program with three CHI hospitals in Nebraska. The Cancer Institute at Saint Elizabeth Regional Medical Center serves a 17-county area in southeast Nebraska, including the state capitol of Lincoln. The majority of St. Elizabeth's patients come from the Lincoln metropolitan area in Lancaster County, with the remainder residing in the state's predominantly rural counties.

Saint Francis Medical Center

Saint Francis Cancer Treatment Center Grand Island, NE

NCCCP participant: 2007-2014

PI: Mehmet Copur

The Saint Francis Cancer Treatment Center participated in the NCCCP as part of a coordinated regional program with three CHI hospitals in Nebraska. The center's primary service area covers more than 80,000 residents in four counties where the majority of the population is rural. The tertiary market for Saint Francis stretches from South Dakota to Kansas and into the Nebraska panhandle; the hospital serves as the regional referral center for 26 counties in central Nebraska.

St. Joseph Medical Center

St. Joseph Cancer Institute Towson, MD

NCCCP participant: 2007-2012

PI: Mark Krasna (2007–2011), Richard Deming (2011–2012)

St. Joseph Medical Center is an acute care, regional medical center that joined the NCCCP as a member of Catholic Health Initiatives. Founded in Baltimore in 1864 by the Sisters of St. Francis of Philadelphia, St. Joseph moved to Towson in 1965, a suburban community of Maryland within Baltimore County. While participating in the NCCCP, more than 40% of the medical center's patients came from outside its primary service area, nearly 25% of the service area was African American and there was a high concentration of adults over 55 in the area.

Individual Community Hospitals



Billings Clinic

Billings Clinic Cancer Center

Billings, MT

NCCCP participant: 2007-2014

Subcontract PI: Tom Purcell (2007-2010), John

Schallenkamp (2010–2014)

Billings Clinic serves an expansive, medically-underserved rural area where most of the residents live in remote, frontier communities. The hospital's defined service area covers 40 counties in eastern Montana, northern Wyoming, and the western Dakotas. The area includes five American Indian Reservations. Primary and specialty care clinics in remote locations address the hospital's vast service area, along with collaborative partnerships with several critical access hospitals.



Christiana Care Health System

Helen F. Graham Cancer Center

Newark, DE

NCCCP participant: 2007–2014

Subcontract PI: Nicholas Petrelli

Christiana Care Health System is the major healthcare provider in Delaware and the surrounding region, including portions of Maryland, Pennsylvania and New Jersey. It includes two hospitals: the 780-bed Christiana Hospital in suburban New Castle County and the 290-bed Wilmington Hospital in downtown Wilmington. The Health System treats 60% of the region's patients with cancer. The Helen F. Graham Cancer Center treats more than 3,000 new cancer cases annually and includes the Center for Translational Cancer Research, a collaborative program with the University of Delaware, the Delaware Biotechnology Institute, and the A. I. duPont Children's Hospital.



Einstein Healthcare Network

Einstein Cancer Treatment Center Philadelphia, PA

NCCCP participant: 2010–2014

Subcontract PI: William Tester

The Einstein Healthcare Network is a private, not-for-profit organization with several facilities and outpatient centers. The Einstein Medical Center in Philadelphia is a tertiary care teaching hospital affiliated with the Thomas Jefferson Medical School and the University of Pennsylvania School of Dental Medicine. The Cancer Treatment Center serves approximately 1,400 new cancer patients each year, covering a culturally and ethnically diverse population area.

GEISINGER

Geisinger Medical Center

Geisinger Medical Center Cancer Institute Danville, PA

NCCCP participant: 2010-2014

Subcontract PI: Thanjuvar Ravikumar (2010–2012) Subcontract Co-PIs: Matthew Facktor and Victor Vogel (2012–2014)

Geisinger Medical Center is a nonacademic-based community hospital with teaching programs. The primary service area spans 10 counties and serves over 550,000 people; the regional service area covers 43 counties that serve over 2.6 million people. The Cancer Institute is in a distinct location on the medical center campus and treats more than 2,000 new cancer cases annually.

GUNDERSENHEALTH SYSTEM®

Gundersen Health System

Gundersen Lutheran Center for Cancer & Blood Disorders La Crosse, WI

NCCCP participant: 2010-2014

Subcontract Co-PIs: Alcee Jumonville (2010–2014) and Ronald Go (2010–2013)

The Gundersen Health System is a fully integrated, physician-led, non-profit system serving a 19 county area in western Wisconsin, northeastern Iowa, and southeastern Minnesota. The tertiary referral center includes a teaching hospital, Level II Trauma and Emergency Center, and the Gundersen Lutheran Center for Cancer & Blood Disorders, which treats an average of 1,300 new cancer patients each year.



Hartford Hospital

Helen and Harry Gray Cancer Center

Hartford, CT

NCCCP participant: 2007–2014 **Subcontract PI: Andrew Salner**

Hartford Hospital is a tertiary care and community health care center that serves a statewide population of more than one million people in central and northern Connecticut. The hospital's Helen & Harry Gray Cancer Center treats approximately 2,700 new cancer patients annually and cares for nearly 20% of all newly diagnosed cancer patients in Connecticut. The primary patient service area includes a racially and ethnically diverse population in a state where cancer is the second leading cause of death.



Lehigh Valley Health Network

John and Dorothy Morgan Cancer Center Allentown, PA

NCCCP participant: 2010-2014

Subcontract PI: Debbie Salas-Lopez

Lehigh Valley Health Network (LVHN) serves over 800,000 people living in east-central Pennsylvania. LVHN is composed of three hospitals, eight health centers, numerous primary and specialty care physician practices, as well as home health services and hospice care. The John and Dorothy Morgan Cancer Center registers over 2,600 new analytic cases every year.



Maine Medical Center

Maine Medical Center Cancer Institute

Portland, ME

NCCCP participant: 2010–2012 Subcontract PI: Susan Miesfeldt

The Maine Medical Center (MMC) is a primary and tertiary non-profit medical center in Southern Maine, a state where more than 60% of the residents live in rurally remote areas. Serving the greater Portland metropolitan area, the MMC Cancer Institute provides care to approximately 2,500 cancer patients per year and supports clinicians who travel to rural clinics.



Mercy Health Saint Mary's

Lacks Cancer Center Grand Rapids, MI

NCCCP participant: 2010–2014 **Subcontract PI: Laurence McCahill** (2010–2011), **Thomas Gribbin** (2011–2014)

Saint Mary's is a teaching hospital that is part of Mercy Health, a healthcare system in Michigan rooted in its heritage as a faith-based organization. The catchment area is designated a medically underserved population in a service area that covers a population of more than 610,000 residents.



Mercy Medical Des Moines

Mercy Cancer Center Des Moines, IA

NCCCP participant: 2010–2014

Subcontract PI: Richard Deming

The not-for-profit hospital, part of the Catholic Health Initiatives organization, is situated on two campuses in the Des Moines, Iowa area and provides services for patients in a 40 county region. The Mercy Cancer Center serves approximately 1,700 new cancer patients each year.



Northside Hospital

Northside Hospital Cancer Care Program Atlanta, GA

NCCCP participant: 2010-2014

Subcontract PI: Asad Bashey (2010–2011), Guilherme

Cantuaria (2011-2014)

Northside Hospital is a community-based hospital system made up of three acute care community hospitals that cover a service area of 13 counties with 3 million residents. The Cancer Institute sees more than 3,500 new analytic cases each year.



Norton Suburban Hospital

Norton Cancer Institute

Louisville, KY

NCCCP participant: 2010-2014

Subcontract PI: Sandra Brooks (2010–2013), Steven

Pursell (2014)

Norton Suburban Hospital is one of two primary hubs for Norton Healthcare in one of the largest population areas in Kentucky (over 720,000). The Norton Cancer Institute treats, on average, more than 1,000 new cancer patients annually and has approximately 12,000 outpatient oncology visits per year.



Our Lady of the Lake

Mary Bird Perkins Cancer Center

Baton Rouge, LA

NCCCP participant: 2007-2014

Subcontract PI: Kevin Guidry (2007–2009), Mitch Berger

(2009–2012), **David Hanson** (2012–2014)

Our Lady of the Lake is the largest private medical center in Louisiana, a state with high cancer mortality rates and the highest poverty rate in the nation. The Mary Bird Perkins Cancer Center serves over 2,200 new cancer cases each year and provides nearly 42,000 cancer treatments annually.



Providence Portland Medical Center

Providence Cancer Center

Portland, OR

NCCCP participant: 2010–2012 **Subcontract PI: Walter Urba**

Providence Portland Medical Center and the Providence Cancer Center are located in the Portland metro area that has a populace of approximately 1.5 million. The healthcare delivery system provides cancer care for approximately 1/3 of the 16,000 Oregonians newly diagnosed with cancer each year.



Queen's Medical Center

The Queen's Cancer Center

Honolulu, HI

NCCCP participant: 2010–2014 **Subcontract PI: Paul Morris**

The Queen's Medical Center is the largest private, nonprofit, acute care medical facility in Hawaii and the leading medical referral center of the Pacific Basin. The Queen's Cancer Center, through their affiliated physicians, treats an average of 2,300 new cancer cases each year—more than 45% of Hawaii's residents diagnosed with cancer annually.



Sanford USD Medical Center

Sanford Cancer Center

Sioux Falls, SD

NCCCP participant: 2007-2014

Subcontract Co-PIs: Maria Bell and Thomas Asfeldt

Sanford USD Medical Center is part of Sanford Health, a comprehensive, integrated, rural, not-for-profit healthcare system. The Sanford Cancer Center is the destination cancer center in a five-state region as it offers inpatient and outpatient services across the full continuum of care. Serving an average of more than 1,400 new cancer patients each year, the population area includes several Native American communities that are a focus population for the site's Health Disparities Research Center.



Spartanburg Regional Healthcare System

Gibbs Cancer Center Spartanburg, SC

NCCCP participant: 2007–2014

Subcontract PI: James Bearden

Spartanburg Regional Healthcare is a three-hospital system; the medical center is located in a rural area of the state's northwest region that encompasses a five-county service area. The hospital is one of South Carolina's largest community-based healthcare providers; residents of this area live in rural and suburban areas where many lack health insurance. The Gibbs Cancer Center treats more than 1,600 new cancer cases annually.



St. Joseph Health

The Center for Cancer Prevention and Treatment Orange, CA

NCCCP participant: 2007-2014

Subcontract Co-PIs: Maria Gonzalez (2012–2013), Nancy Harris (2007–2012), Jay Harness (2007–2014)

Located in a dense urban area, St. Joseph serves an ethnically diverse population, including large Hispanic and Asian communities. The hospital provides the highest number of emergency room visits of any hospital in the region. The Center for Cancer Prevention and Treatment was the first of its kind in Orange County to provide a full range of diagnostic services, chemotherapy, radiation therapy, surgery, clinical trials and stem cell transplants. The center treats more than 1,700 new cancer patients each year.



St. Joseph Mercy Hospital

St. Joseph Mercy Cancer Center Ypsilanti, MI

NCCCP participant: 2010–2012 Subcontract PI: Philip Stella

St. Joseph Mercy Hospital is a teaching hospital and regional tertiary care facility that is the flagship hospital for the Saint Joseph Mercy Health System, which comprises seven hospitals in a tri-county area with over 2.5 million residents. The St. Joseph Mercy Cancer Care Center opened in 1992 and sees more than 2,000 analytic cases each year.



St. Joseph's/Candler

Nancy N. and J.C. Lewis Cancer & Research Pavilion

Savannah, GA

NCCCP participant: 2007–2014 **Subcontract PI:** H. A. Zaren

St. Joseph's/Candler is the largest community healthcare provider in the region, with three service areas (primary, secondary, and tertiary) that cover 33 counties and a population base of over 1.1 million. The Nancy N. and J.C. Lewis Cancer & Research Pavilion houses the complete continuum for cancer care and includes surgical, medical and radiation oncology, as well as supportive services from pastoral care to navigation.



St. Luke's Regional Medical Center

Mountain States Tumor Institute

Boise, ID

NCCCP participant: 2010–2012 **Subcontract PI: Thomas Beck**

St. Luke's is the only not-for-profit Idaho-based healthcare system in the state of Idaho. The hospital serves rural and frontier communities that are only connected by narrow, rugged, two-lane roads. The Mountain States Tumor Institute is the region's largest provider of cancer services and sees thousands of cancer patients each year.

Waukesha Memorial Hospital

ProHealth Care Regional Cancer Center

Waukesha, WI

NCCCP participant: 2010-2012

Subcontract PI: Michael Thompson (2010), **Timothy**

Wassenaar (2010-2012)

Waukesha Memorial Hospital is the largest medical center between Milwaukee and Madison, Wisconsin, and is the flagship hospital for ProHealth Care; the service area covers a population of more than 400,000. The Regional Cancer Center is among the three largest cancer centers in the region and diagnosis more than 1,400 new cancer cases each year.

NCCCP Program Advisory Committee (NPAC) Members

Membership on the NCCCP Program Advisory Committee included representation from key areas across divisions within the NCI. While several individuals supported NPAC only during the NCCCP pilot phase or had discrete time points of involvement, the following list recognizes all individuals who served as NPAC members.

Jeff Abrams, MD

NCI Division of Cancer Treatment and Diagnosis

Brenda Adjei, EdD

NCI Center to Reduce Cancer Health Disparities

Joy Beveridge, MS

Leidos Biomedical Research, Inc.

Frank Blanchard

Leidos Biomedical Research, Inc.

Mary Anne Bright, RN, MN

NCI Office of Public Information and Resource Management

Ken Buetow, PhD

NCI Center for Biomedical Informatics and Information Technology

Angela Carrigan, MPH

Leidos Biomedical Research, Inc.

Kate Castro, RN, MS, AOCN

NCI Division of Cancer Control & Population Sciences, Outcomes Research Branch

Kenneth Chu, PhD

NCI Center to Reduce Cancer Health Disparities

Steve Clauser, PhD

NCI Division of Cancer Control & Population Sciences, Outcomes Research Branch

C. Norman Coleman, MD

NCI Center for Cancer Research

Carolyn Compton, MD, PhD

NCI Division of Cancer Treatment and Diagnosis, Biorepositories and Biospecimen Research Branch

Andrea Denicoff, RN, MS

NCI Division of Cancer Treatment and Diagnosis

Leslie Derr, PhD

NCI Center for Biomedical Informatics and Information Technology

Eileen Dimond, RN, MS

NCI Division of Cancer Prevention

Brenda Duggan, RN, BSN

NCI Center for Biomedical Informatics and Information Technology

Deb Hill, MS

Leidos Biomedical Research, Inc.

Sabrina Islam-Rahman

NCI Office of Public Information and Resource Management

Cheryl Jernigan, CPA, FACHE

NCI Director's Consumer Liaison Group

Maureen Johnson, PhD

NCI Office of the Director

Arnold Kaluzny, PhD

NCI Consulting Advisor (University of North Carolina, Chapel Hill)

Beverly Laird, PhD

NCI Director's Consumer Liaison Group

Jean Lynn, RN, MPH, OCN

NCI Office of the Director, Coordinating Center for Clinical Trials

Worta McCaskill-Stevens, MD

NCI Division of Cancer Prevention, Community Oncology Research Program

Nancy Murphy

Consultant to the NCI Office of Public Information and Resource Management

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NCI Consulting Advisor (Strategic Visions in Healthcare, LLC)

Lynne Padgett, PhD

NCI Division of Cancer Control & Population Sciences, Behavioral Research Program

Wendy Patterson, Esq.

NCI Technology Transfer Branch

Irene Prabhu Das, PhD

NCI Division of Cancer Control & Population Sciences, Outcomes Research Branch

Jim Robb, MD

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Julia Rowland, PhD

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John Speakman

NCI Center for Biomedical Informatics and Information Technology

Sanya Springfield, PhD

NCI Center to Reduce Cancer Health Disparities

Diane St. Germain, RN, MS, CRNP

NCI Division of Cancer Prevention

Mary Ann Van Duyn, MPH, PhD

NCI Center to Reduce Cancer Health Disparities

Barbara Wingrove, MPH

NCI Center to Reduce Cancer Health Disparities

Jo Anne Zujewski, MD

NCI Division of Cancer Treatment and Diagnosis

NCCCP Pilot Evaluation

RTI International received the competitively awarded NCI contract in 2007 to design and conduct an independent, formative and summative evaluation of the NCCCP pilot phase (2007–2010) to assess the program's capacity, cost, and progress in becoming a community-based research platform supporting the NCI's research mission. RTI conducted a multi-year, mixed method evaluation to examine various levels of program implementation. Debra Holden, PhD, served as the Principal Investigator for RTI's contract. The evaluation involved an economic evaluation (micro-cost analysis and strategic case analysis); a comparative evaluation that included non-NCCCP hospitals; an analysis of clinical trial accruals; patient surveys; and case studies, led by content experts.

NCCCP Pilot Evaluation Oversight Committee

An oversight committee, chaired by Dr. Mary Fennell (Brown University), was established to guide RTI International's evaluation of the NCCCP pilot phase. The committee consisted of NCI consulting advisors, external members, and NCI staff; the list of committee members follows.

Joy Beveridge, MS

Leidos Biomedical Research, Inc.

Steve Clauser, PhD

NCI Division of Cancer Control & Population Sciences

Jan Clement, PhD

Virginia Commonwealth University

Mary Fennell, PhD

Brown University

Thomas Gribbin, MD

Cancer & Hematology Centers of Western Michigan

Mark Hornbrook, PhD

Kaiser Permanente Center for Health Research

Maureen Johnson, PhD

NCI Office of the Director

Timothy Johnson, PhD

University of Illinois at Chicago

Arnold Kaluzny, PhD

University of North Carolina at Chapel Hill

Stephen Mick, PhD, FACHE

Virginia Commonwealth University

Donna O'Brien, MHA

Strategic Visions in Healthcare, LLC

Rogsbert Phillips, MD

Emory Healthcare

Irene Prabhu Das, PhD

NCI Division of Cancer Control & Population Sciences

Bryan Weiner, PhD

University of North Carolina at Chapel Hill

Jane Zapka, ScD

The Medical University of South Carolina

NCCCP Chronicle

Part V Disseminating Information

Program participants have disseminated information about and lessons learned from the NCCCP by publishing more than 50 manuscripts, presenting more than 50 posters, and giving nearly 60 oral presentations at national, regional and local conferences. The list below includes reference details for published articles, book excerpts, and the NCCCP monograph, as well as links to the final reports about program evaluations.

2014

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NCCCP Chronicle



Over the course of the NCCCP, the various subcommittees created several tools to guide program development. The tools are home grown by the network and have not been validated (i.e., tested for reliability and validity), yet were valuable for program initiatives, progress measurement, data collection, and/or site self-assessments. A brief description of NCCCP-developed tools is listed below; links to those that are publicly available are embedded in the item names.

Biospecimens Gap and Fill Assessment Tool (GAFAT) and Biospecimen Percentage Implementation Tool (BPIT):

The GAFAT was used by NCCCP sites to identify gaps in their biospecimen programs and solutions to fill those gaps. It addressed competencies such as biospecimen consent; annotation, collection, storage, and distribution; biosafety; quality assurance; and responsible custodianship. The GAFAT helped sites evaluate their capabilities for proper handling of biospecimens and showed capacity for supporting and participating in clinical trials with a tissue collection component. Many NCCCP sites also used the BPIT, an Excel spreadsheet, to track quarterly progress for implementing the solutions or "fills" identified on the GAFAT.

Breast Screening Tracking Tool: A quality improvement tool to monitor the lag time between initial screening for breast cancer, diagnosis, treatment and recruitment for clinical trials, particularly for the underserved. The tool is a spreadsheet that records patient demographics, screening and diagnostic information, treatment information, and patient navigation details.

Cancer Medical Staff Conditions of Participation: A document that outlines the 'conditions of participation' recommendations to support the goals of the NCCCP. The tool addresses the core elements of the requirements – including participation in clinical trials and quality of care initiatives – board certification, and acceptance of uninsured patients.

Clinical Trials Screening & Accrual Log: A web-based application to track patients screened and enrolled in clinical trials. A case report form (CRF) of the online Log is provided to show the data collection elements. The tool is used to track patient demographic information and perform data analysis. The data is used to identify individual and site accrual barriers to help develop strategies to increase clinical trial participation among patients.

Clinical Trials Best Practice Matrix: A tool designed and used by the NCCCP sites to assess, measure, and report progress on their clinical trial infrastructure capabilities. The self-assessment tool included best practice clinical trial site characteristics—or 'attributes'—such as CT portfolio diversity, physician engagement in CTs, multidisciplinary team involvement, education standards, and underserved community outreach and accrual. The NCI's understanding of the tool's value to the NCCCP hospitals led to a formative evaluation in collaboration with the University of North Carolina. Based on input from multiple stakeholders in the community oncology setting (e.g., ASCO Community Research Forum, community investigators), the tool attributes and indicator levels were refined in 2014. The revised tool has been renamed the Clinical Trials Assessment of Infrastructure Matrix (CT AIM); it was presented at ASCO's 2014 Annual Meeting as well as the Quality Symposium, and a manuscript about the revision process and the current version of CT AIM is underway.

Disparities Dashboard: This tool provides an overview of the program's efforts to address healthcare disparities. The document specifies metrics used to ensure that disparities issues are considered in clinical trials, biospecimens, information technology, quality of care, and survivorship. The dashboard also outlines focused efforts around screening, community outreach, navigation, and tracking race and ethnicity data.

Genetic Counseling Assessment Tool: A tool that defines the minimal genetic counseling service requirements. The tool measures the key components of a cancer genetics program based on NCCN guidelines for genetic risk assessment and can be used to guide program development.

Multidisciplinary Care (MDC) Self-Assessment Tool: This tool defines an MDC model for cancer care in the community and describes the key indicators (i.e., case planning, physician engagement, coordination of care, infrastructure, and financial considerations) to measure the level of MDC implementation. The self-assessment tool may be used by community cancer centers to create and/or expand MDC programs.

Minority Matrix / Strengths, Weaknesses, Opportunities, Threats (SWOT): The Minority Matrix/SWOT can be used to define the minority or underserved populations served, collect information about the community's demographic makeup, identify strengths and weaknesses of factors that influence clinical trial accruals, and improve accrual of underrepresented populations to clinical trials.

Navigation Self-Assessment Tool: A self-assessment tool that can be used to build or advance a navigation program based on criteria discussed in each category. Each category represents a component of navigation that should be present in any program. The levels of the tool provide a way to advance from the minimum to a benchmark status.

Palliative Care Assessment Tool: Allows community cancer centers to self-assess and improve their palliative care services. Palliative care programs in some health care settings may utilize "supportive care" or "symptom management" in their titles.

Physician Director Role: A description of the recommended responsibilities for a community cancer center physician director, including physician qualification requirements and program oversight responsibilities for supporting active participation in the NCCCP network requirements/program components.

Psychosocial Care Assessment Tool: A self-assessment tool for community cancer centers to evaluate and improve their psychosocial care services. The tool provides guidance for ensuring that the psychosocial needs of cancer patients are met. Psychosocial health services are those psychological and social services that enable cancer survivors, their families, and health care providers to optimize biomedical health care and to manage the psychological/behavioral and social aspects of cancer and its consequences so as to promote better health.

Template for Community Outreach: A tool to guide focused outreach program planning in an effort to reduce cancer healthcare disparities. The tool outlines specific activities (e.g., define target population, determine potential partners and partnership goals, establish expected outcomes, develop metrics, document barriers, assess effectiveness of interventions) and provides an overview of actions and considerations that will help implement strategic community outreach efforts.

Chronicle

Appendix II NCCCP Yearly Progress Reports: 2008–2013

The First Year Note of the Fi

NCI Community Cancer Centers Program Pilot: 2007-2010

Introduction

As the pilot phase of the NCI Community Cancer Centers Program (NCCCP) concludes its first of three years, each participating community hospital has taken steps to accelerate cancer research and raise the quality of care—and to do both with a special emphasis on minority and underserved patients.

The 16 participating hospitals have made considerable progress toward achieving the major goals of the pilot. All sites are accruing more patients to clinical trials. Some have begun moving their decentralized, paper-based records systems into computerized data that will improve both cancer research and patient care, while enabling minorities and underserved patients to more effectively benefit from the most up-to-date, evidence-based care.

NCCCP pilot hospitals are at the forefront of putting into place national standards for handling biospecimens bound for research laboratories. These standards will improve cancer research and the development of advanced therapies custom-tailored to individual patients.

These community hospitals have entered into new collaborations with NCI-designated Cancer Centers located at major research institutions around the country and expanded their relationships with local private medical practice oncology physicians. Through these connections, NCI is extending the reach of its research programs into rural, inner-city, and underserved communities.

The pilot is beginning to define for the NCI what it will take to build a national network of community cancer centers that are fully engaged with the research community and that provide the latest evidence-based, multidisciplinary care and treatment to patients of all racial and ethnic backgrounds, and socioeconomic standings in their home communities.

Summary of Noteworthy Accomplishments

Sites launch concerted effort focused on three phase III clinical trials

NCCCP pilot hospitals began screening patients for three NCI Clinical Trials Support Unit (CTSU) trials in February 2008. They are tracking patient demographics, protocol screening methods, and enrollment details including reasons for not participating. Initial evaluation suggests that this effort has increased the patient accrual rate to each of the three trials for breast, colorectal, and lung cancers.

An increase in relationships with major research institutions

NCCCP pilot sites have increased the number of collaborations and other formal linkages they have with NCI-designated Cancer Centers and other academic biomedical research institutions. This benefits research by linking patients with early- and later-stage clinical trials and gives patients greater access to the latest advances in medical science.

Breast cancer screening tracking tool improving care and expanding clinical trials

The tracking tool, developed jointly by the pilot hospitals, is being tested as an effective mechanism for monitoring the lag time between initial screening, diagnosis and care, and recruitment for clinical trials, particularly for underserved individuals. Pilot hospitals are at various stages of assessing the new tool. One hospital has used the tool to cut one week off the average time between cancer screening and follow-up.

Formal agreements forged to improve access for disparate populations

Pilot sites are linking with NCI's Community Networks Program (CNP) to reduce cancer health disparities through community-based education, training, and research among racial/ethnic minorities and underserved populations.

Breast cancer treatment summary and care plan developed

Building on the new ASCO treatment summary forms, the pilot sites created a survivorship care planning tool for women completing breast cancer treatment. The template includes detailed information on treatments received, guidelines for surveillance, as well as a list of risk factors for potential long-term and late effects of therapy and approaches to monitor and address these possible problems. Use of the breast cancer treatment summaries by physicians and patients will be evaluated over the next year.

Sites connect with NCI's Cancer Information Service Resources

Connections are being made between NCI's Cancer Information Service (CIS) and the NCCCP pilot sites. The CIS staff are introducing to the sites NCI patient education materials, program planning resources, and NCI evidence-based programs and tools. NCCCP patient navigators and other pilot staff (100 total) also recently participated in a two-hour webinar hosted by CIS which resulted in an increase from one to nine in the number of NCCCP patient navigators actively recruiting patients to the CTSU clinical trials mentioned above.

Collaboration with Commission on Cancer to improve patient care

NCCCP pilot hospitals are working with the American College of Surgeons' Commission on Cancer to carefully assess quality-of-care improvements against commission indicators. Through a new Quality of Care Collaborative group, the hospitals are sharing data for this assessment project.

Oncology group practices join in NCCCP/ASCO quality initiative

Nineteen physicians from 5 NCCCP pilot sites are participating in the American Society of Clinical Oncology's (ASCO) Quality Oncology Practice Initiative (QOPI). The program involves intensive, quality-indicator data collection for which ASCO does the analysis, comparing QOPI-participating physicians with other cancer physicians around the country. NCCCP pilot hospitals are enrolling more doctors in the program, which will boost QOPI's analytic power.

QOPI will collect physician practice data for comparison with ASCO quality-of-care guidelines. Feedback will help NCCCP pilot medical staff identify areas for further improvement. This voluntary initiative exceeds pilot requirements and exemplifies the successful efforts of hospitals working with their private practice oncologists to achieve and exceed NCCCP pilot goals.

Multidisciplinary Care Model driving patient care improvements

NCCCP pilot hospitals have defined a Multidisciplinary Care (MDC) model for cancer care in a community setting that describes aspects of team care that are critical to overall quality of care. An in-depth MDC assessment tool has been developed and includes integrated efforts in case planning, physician engagement, coordination of care, infrastructure, and financial considerations. Sites will assess their programs against the model to make improvements. A similar model for Genetic Counseling Service requirements has also been developed to guide improvements.

Cancer medical staff conditions-of-participation model proposed

To improve physician performance, the NCCCP pilot network has proposed conditions of participation for medical staff at community cancer centers. The document aims to set the baseline for experience and performance requirements. Criteria include the volume of cancer patients, participation in clinical trials and in quality of care initiatives/studies, acceptance of uninsured patients, and board certification. Sites will be encouraged to adopt these conditions of participation.

NCI and ASCO sign agreement on electronic health records

As a result of the NCCCP pilot, NCI has a memorandum of understanding with ASCO's Electronic Health Records initiative (EHR). ASCO is encouraging adoption of electronic health records to improve the quality of oncology practice. NCI and NCCCP pilot sites are ensuring that ASCO, as well as the electronic health records vendors, incorporate the special needs of community hospitals in their planning and development, and to ensure that resulting health records templates are compatible with NCI's caBIG™ (cancer Biomedical Informatics Grid™). NCCCP pilot sites led the efforts for caBIG™ experts to meet with EHR vendors.

Seven hospitals adopting caBIG™ clinical trials tools; one sharing research data

Fifteen of the 16 pilot hospitals have paper-based recordkeeping but that is quickly changing. Four sites have begun to integrate data electronically, and one of those will use electronic records in an NCI trial. Seven pilot hospitals are adopting caBIG[™] clinical trials tools; one is adopting caTissue and sharing data with the clinical research community. Other sites are at various stages of assessing or adopting various caBIG[™] resources.

NCCCP pilot takes first step in standardizing collection of medical specimens for research

To help meet the critical need for standards for collecting, storing, and delivering medical specimens for research, the NCCCP pilot is implementing NCI recommendations for snap-frozen and formalin-fixed tissues and other samples. This group of hospitals is among the early adopters of the NCI Best Practices for Biospecimen Resources, which aims to improve the quality of medical specimens that are becoming increasingly important for research.

Sites proposing biospecimen collection for The Cancer Genome Atlas

Five NCCCP pilot organizations applied to The Cancer Genome Atlas (TCGA) Prospective Specimen Collection initiative and one or more awards are likely to be made. Through TCGA, NCI and the National Human Genome Research Institute seek to accelerate understanding of the molecular basis of cancer through large-scale genome sequencing and other analyses.

Sites raising awareness through the media, reaching into minority communities

Pilot hospitals publicized their participation in NCCCP through newspaper articles, paid advertising, in-house publications, and community events. They conducted extensive outreach, education, and community awareness projects, with a focus on underserved and underrepresented populations.

Pilot sites co-invest \$3 for every \$1 of NCI funding in public-private partnership

NCCCP pilot organizations and their executive leadership have made a strong commitment to bringing leading-edge research and care to the community setting. They have contributed at least \$3 for every \$1 of NCI funding to support pilot activities, for a total co-investment of more than \$47 million from the pilot sites.

More than two dozen new community hospital staff hired to support NCCCP

Pilot sites have hired more than two dozen staff to support the NCCCP pilot, including program directors, a director of cancer genetics and stem cell biology, a board-certified palliative care physician, oncologists, clinical trials and outreach coordinators, clinical research staff, patient navigators and advocates, IT managers, and patient care coordinators.

NCI initiates NCCCP evaluation with RTI International

In September 2007, NCI selected RTI International (RTI) as the evaluator for the NCCCP pilot. The evaluation will include a cost study, a patient survey (to be conducted in the fall of 2008 and repeated toward the end of the pilot period), and a case study that includes annual site visits to all pilot sites implementing the NCCCP. So far, the Evaluation Team has worked to develop a comprehensive evaluation plan for all 3 years and drafted protocols to be used during the first year of site visits.

The cost study is currently underway with plans for the collection of cost data from all the pilot sites, and with a "business case" or return-on-investment study under development. The patient survey has been drafted and is currently being pre-tested with patients at a few of the pilot sites. Patient survey data collection is planned for late 2008.

Years Two and Three

In the remaining two years of the NCCCP pilot, the sites are working on their individual plans to meet the long term goals of the initiative. In addition, they will continue collaborating to further strengthen this network of community cancer centers and keep looking ahead to continue learning from this public-private partnership for the best ways to advance state-of-the-art cancer care and research in the community setting.







NCI COMMUNITY CANCER CENTERS PROGRAM Services Noticommunity CANCER CENTERS PROGRAM Services Noticommunity CANCER CENTERS PROGRAM OF TWO June 08-June 09

Introduction

The pilot phase of the National Cancer Institute (NCI) Community Cancer Centers Program (NCCCP) ended its second of three years by implementing a variety of initiatives to advance clinical research and improve the quality of cancer care at community hospitals – with an emphasis on minority and underserved patients.

The NCCCP pilot is exploring what it takes to conduct complex cancer clinical trials and offer state-of-the-art treatment options in a hometown setting so patients do not have to commute to large, university-based medical centers to receive high-quality cancer care. The 16 participating hospitals in the NCCCP have already begun to share their initial findings and best practices with other community hospitals.

The pilot hospitals – located in 14 states across the country – serve patients from a wide range of geographic and demographic localities in rural, small-town, and underserved urban areas. This diversity offers a potential framework for a national program of community cancer centers that would be integrated with NCI's extensive network of cancer research and quality care initiatives.

Key Accomplisments by Focus Areas

1. Reduce Cancer Healthcare Disparities

- All NCCCP hospitals now have patient navigators who help reduce healthcare disparities by guiding each patient – according to his or her individual needs – through the complex web of clinical care, social services, and financial counseling.
- Three-quarters of NCCCP sites have become more connected with community
 organizations that conduct outreach for cancer prevention, screening, and treatment.
 Seven NCCCP hospitals have linked to NCl's Community Networks Program to
 reach underserved populations, and more than half of the sites have increased their
 community outreach staffs.
- NCCCP hospitals developed an overarching Disparities Vision Program Overview and Dashboard to ensure that disparities are defined and tracked throughout all aspects of the pilot, including clinical trials, biospecimen collection, information technology, quality of care, survivorship, screening, community outreach, and patient navigation.
- Pilot sites developed the NCCCP Template for Community Outreach, outlining ways to plan, implement, and evaluate outreach efforts targeted to specific population groups and cancer types.

Worth Noting in Healthcare Disparities:

• To unite their efforts, all pilot sites adopted the same definition of healthcare disparities: "We define the populations affected by health disparities to include racial and ethnic minorities, and other underserved populations: residents of rural areas, women, children, the elderly, persons with disabilities, the uninsured, the underinsured, and those who are socioeconomically disadvantaged." In addition, NCCCP sites are working to introduce into their programs standardized categories for race and ethnicity tracking based on Office of Management and Budget guidelines and mandated by the Department of Health and Human Services.

2. Increase Patient Involvement in Clinical Trials

- Qualified patients at NCCCP sites now have easier access to NCI-sponsored treatment trials for five common cancer types, including breast, colon/rectum, kidney, lung, and non-Hodgkin lymphoma.
 Their participation provides researchers a larger, more-diverse cohort of patients to test new approaches, helping to speed the delivery of new cancer drugs to the public.
- All 16 hospitals are using a clinical trials screening accrual log for capturing patient data, including
 the race and ethnicity of patients screened for and enrolled in clinical trials compared with only
 one-third of sites tracking these data at the beginning of the pilot. This effort is providing insights
 into healthcare disparities, ways to increase clinical trial enrollment, and how to target new cancer
 treatments for specific populations.
- The pilot sites are engaging in professional education about clinical trials, including participation in a Webinar series for community healthcare providers about cultural awareness and recruitment of underserved populations.

Worth Noting in Clinical Trials:

Clinical trials can offer patients access to promising new cancer treatments before they are
available to the general public. Trials are also necessary to gain Food and Drug Administration
(FDA) approval of new treatments for use by the public. Yet, only 3 percent of adult cancer patients
participate in trials. All NCCCP sites are working toward eliminating patient-related barriers to clinical
trial participation by providing interpreters, patient navigators, financial assistance programs, and
community education.

3. Enhance Information Technology Capabilities

- The NCCCP sites made strides this year to convert paper-based patient records to electronic
 health records (EHRs) and are beginning to demonstrate what is needed to integrate EHRs into
 the workflow of a community healthcare system. Work is under way, through a joint venture of NCI
 and the American Society of Clinical Oncology (ASCO), on the development of requirements for an
 oncology-extended EHR, which will be a primary focus in the third year of the pilot.
- Each NCCCP pilot site has developed an individual informatics strategy, including details of the
 technologies they will employ and how they will make them interoperable with the clinical systems
 they have in place. Many of the sites are adopting NCI's caBIG® (cancer Biomedical Informatics
 Grid®) tools and resources as part of their plans. The sites intend to submit for publication an article
 on using information technology to enhance community-based clinical research in year three.

Worth Noting in Information Technology:

 Although less than 2 percent of U.S. hospitals have a comprehensive EHR system in place, evidence is emerging that EHRs can improve the quality and efficiency of medical care and cancer research. The NCCCP is involved in breaking new ground in moving from decentralized, paperbased records systems to computerized systems. Success in this area could make the pilot a model for the nation's healthcare system as it moves toward electronic patient data.

4. Standardize Biospecimen Collection

All sites are assessing what it will take to adopt NCl's Best Practices for Biospecimen Resources
to improve the quality of medical specimens that are becoming increasingly important for research.
These guidelines set standards for collecting, documenting, storing, and transmitting specimens to
cancer research laboratories.

All sites continue to implement NCI recommendations for snap-frozen and formalin-fixed tissues.
These recommendations delineate essential, basic steps to ensure that medical specimens are
of high quality and value for research and patient care. Several sites are collaborating with NCIdesignated Cancer Centers and other academic institutions for tumor biospecimen collection.

Worth Noting in Biospecimens:

• Three NCCCP pilot sites are collecting cancer biospecimens for The Cancer Genome Atlas (TCGA), a collaborative effort of NCI and the National Human Genome Research Institute. The sites are the first community hospitals in the United States to participate in this project to accelerate understanding of the molecular basis of cancer through the application of genome analysis technologies, including large-scale genome sequencing. These sites are involved in TCGA working groups to develop disease site-specific protocols for collecting rare, limited tumor specimens, including specimens from breast, esophageal, and pancreatic tumors.

5. Improve the Quality of Cancer Care

- All NCCCP pilot hospitals are now offering their patients genetic counseling to determine risk levels for certain cancers and to help genetically susceptible patients identify the best prevention or treatment approaches. The NCCCP has developed the *Genetic Counseling Assessment Tool* to define the minimal genetic counseling service requirements to guide improvements.
- Eleven of the 16 sites now have physicians participating in ASCO's Quality Oncology Practice
 Initiative (QOPI) to measure and improve healthcare quality in medical oncology practices. By
 participating, the NCCCP can compare cancer care provided by the pilot sites to care provided
 nationally. As a result, the pilot sites have made improvements, including the development of
 standardized chemotherapy orders, treatment summaries for patients and referring physicians, and a
 standardized chemotherapy consent form.
- The American College of Surgeons (ACoS) Commission on Cancer visited all NCCCP sites to
 prepare them for beta testing of the Rapid Quality Response System (RQRS), which enables the
 sites to collect cancer treatment data and improve quality of care prospectively.
- Promoting the concept of integrated multidisciplinary cancer care, the NCCCP network developed the Multidisciplinary Care Assessment Tool to set benchmarks against which measurable care improvements can be made.

Worth Noting in Quality of Care:

 The NCCCP sites are increasing their use of evidence-based guidelines for improved quality of care endorsed by the major cancer-research organizations, including ASCO, ACoS, and the National Comprehensive Cancer Network (NCCN).

6. Enhance Survivorship and Palliative Care Services

- With the number of U.S. cancer survivors now exceeding 10 million, optimizing survivorship and
 palliative care services in community settings is more important than ever. The pilot sites drafted a
 Palliative Care Matrix Assessment Tool that allows community hospitals to self-assess their existing
 palliative care programs or develop new ones to ensure that survivors gain the most benefit from
 these programs.
- Two-thirds of the sites have enhanced or initiated new educational programs to support survivors
 after treatment, including sharing information about fear of recurrence, late and long-term effects

of cancer therapy, and lifestyle changes. Many of these programs are being made available to underserved survivor communities through telemedicine, teleconferences, and Internet technologies.

 Most sites have provided education to staff and physicians about psychosocial, survivorship, and palliative care management.

Worth Noting in Survivorship and Palliative Care:

 The NCCCP sites are developing individual treatment summaries and a post-treatment care plan for breast cancer patients completing adjuvant therapy, adapted from a care plan developed by ASCO.
 With recommendations from the pilot sites, NCCCP modified the ASCO documents and provided feedback to ASCO, which is currently considering adoption of the modifications.

Organizational Accomplishments

In addition to the year-two focus area accomplishments, the NCCCP pilot has reached several organizational milestones.

- Evaluation of the NCCCP toward meeting its stated goals is under way, leading into the pilot's third
 year. RTI International, Inc., is conducting a cost study, a patient survey, and a case study, including
 site visits.
- The pilot is developing a physician outreach strategy to educate primary care physicians in the pilot hospital areas about the NCCCP and to encourage referrals to clinical trials, survivorship programs, and other services offered through the pilot sites.
- The network developed recommended Physicians' Conditions of Participation to support NCCCP goals for participation in clinical trials, quality of care, board certification, and acceptance of uninsured patients.
- The NCCCP has begun to share its collective knowledge and best practices via a public Web site
 http://ncccp.cancer.gov/About/Progress.htm, so other community medical institutions can benefit
 from these resources.

Moving into Year Three

In the third and final year of the pilot, the participating hospitals will continue to collaborate with and learn from one another to further strengthen this public-private partnership and share what they learn with community hospitals outside the network. They also will develop a final report for NCI documenting the lessons learned on the best ways to advance state-of-the-art cancer care and research to benefit patients in their home communities.











YEAR THREE

NCI Community Cancer Centers Program: June 2009 - June 2010

Introduction

New knowledge and advanced technology are enabling complex cancer treatments to be provided by community hospitals, where the vast majority of people with cancer in the United States are diagnosed and treated. To enhance and expand upon these capabilities, the NCI Community Cancer Centers Program (NCCCP) was piloted in 2007, seeking ways to improve patient access to the latest scientific advances at community hospitals.

In 2010, NCI expanded the program with funds from the American Recovery and Reinvestment Act (ARRA), adding 14 new cancer centers and enabling the original 16 sites to take on new initiatives. Today, the 30 NCCCP sites in 22 states are developing and evaluating programs to enhance community-based cancer care and creating a community cancer center network to support cancer research.

THE NCCCP MISSION IS TWO-FOLD: TO ENHANCE CANCER CARE AT COMMUNITY HOSPITALS, AND TO CREATE A PLATFORM TO SUPPORT BASIC, CLINICAL, AND POPULATION-BASED RESEARCH.

The NCCCP community cancer centers provide care spanning the cancer care continuum—from prevention, screening, diagnosis, treatment, and survivorship, through end-of-life care. The centers represent a cross-section of community settings – from rural, suburban, and inner city areas – and are committed to serving minority and underserved patients. In addition to enhancing cancer care, the NCCCP network also supports research in collaboration with the NCI Cancer Centers Program, The Cancer Genome Atlas (TCGA), the American Society of Clinical Oncology (ASCO), and the American College of Surgeons' Commission on Cancer (ACOS).

Six focus areas support the NCCCP goals:

Enhance community-based cancer care

- · Reduce cancer health care disparities across the cancer continuum
- · Improve quality of cancer care
- · Expand survivorship and palliative care programs

Support cancer research initiatives

- Support the investigation of new drugs through clinical trials
- Increase quality biospecimen collection for research through a standardsbased approach
- Expand information technology capabilities through electronic health records and NCI's cancer Biomedical Informatics Grid (caBIG®)

Key
Accomplishments
by Focus Area

ENHANCE COMMUNITY-BASED CANCER CARE

REDUCE CANCER HEALTH CARE DISPARITIES ACROSS THE CANCER CONTINUUM

Disparities in cancer health care are a national challenge. The NCCCP sites are addressing disparities by building their capacity to improve access to quality cancer prevention and treatment programs among underserved populations. In the third year of the program, NCCCP sites have continued to target their outreach efforts to underserved neighborhoods in their communities. They have increased the number of cancer screening events and education programs and partnered with cancer advocacy groups to extend their reach into the community. Specific accomplishments include:

- Standardized Race and Ethnicity Categories: To meet NCI's need for standardized data, NCCCP hospitals have united in their approach to collecting race and ethnicity data. This provides a solid foundation upon which to better understand population-specific health care needs, compare quality of care and health outcomes, and assess the need for translation services and cultural awareness training. The sites are standardizing race and ethnicity data collection using U.S. Office of Management and Budget (OMB) guidelines and categories. Such standards are not otherwise widely used by community hospitals across the United States but are recognized as increasingly necessary to measure progress in reducing disparities.
- Increased Cultural Awareness Education: NCCCP sites have embraced the need for improved cultural awareness of specific populations by their staff in order to make progress toward reducing health care disparities. The sites developed a series of educational programs focused on improving access to care and promoting research among diverse patient populations. The sites worked with experts in the field and with patient advocates to develop webinars exploring the health histories and beliefs of African Americans and Native Americans.

IMPROVE QUALITY OF CANCER CARE

The NCCCP is working to promote evidence-based and coordinated cancer care across the cancer care continuum at community cancer centers. The focus in year three has been on developing data to help understand ways to drive improvements in care:

- NCCCP/Commission on Cancer Partnership: The NCCCP sites are testing the American College of Surgeons' Commission on Cancer's new Rapid Quality Reporting System (RQRS). The system provides real-time surveillance and feedback to sites on the status of patients whose cancer care falls within the National Comprehensive Cancer Network (NCCN) guidelines. Data are reported directly from the hospitals' cancer registries, a new approach that makes the information available in a few weeks instead of years enabling closer monitoring and intervention if needed. This NCCCP project is part of a national pilot test of the RQRS system, enabling NCI to compare the performance of NCCCP sites with that of other cancer centers.
- NCCCP/American Society of Clinical Oncology Partnership: NCCCP sites are working to engage their local community-based private practice oncologists in research and quality improvement by participating in ASCO's Quality Oncology Practice Initiative (QOPI), which involves monitoring physician adherence to evidence-based guidelines. As participants in QOPI, NCCCP sites' local physician practices are sharing data and identifying best practices from high-performing oncology offices to develop projects that are aligned with the NCCCP mission and goals.

EXPAND SURVIVORSHIP AND PALLIATIVE CARE PROGRAMS

According to the Institute of Medicine's report, *Lost in Transition*, the end of cancer treatment is too often the end of formalized support for cancer survivors. The NCCCP sites are working to address patients' long-term needs for education, communication and appropriate follow-up medical and supportive care, and to ensure that programs that are adopted are based on the latest, evidence-based scientific findings in survivorship. In year three, NCCCP sites focused on: providing patient treatment summaries and survivorship care plans; promoting approaches for incorporating psychosocial care into the model of cancer care; and exploring effective models of palliative care for cancer patients. Specific accomplishments include:

Patient Treatment Summaries and Survivorship Care Plans:
 NCCCP sites developed a breast cancer patient treatment summary
 and survivorship care plan to provide patients and their primary care
 physicians with important records of the treatment they received, including
 a detailed post-treatment follow-up plan that is informed by best practice
 experiences.

Psychosocial and Palliative Care Matrices: The NCCCP sites focused
on exploring the best ways to incorporate psychosocial and palliative care
into cancer patients' comprehensive treatment plans. The sites developed
a psychosocial matrix and a palliative care matrix and are testing them
at each site for utility and usability. The matrices are self-assessment
and planning tools designed to enable each NCCCP site to evaluate its
capacity to deliver and support high quality psychosocial and palliative
care programs and services.

SUPPORT CANCER RESEARCH INITIATIVES

SUPPORT THE INVESTIGATION OF NEW DRUGS THROUGH CLINICAL TRIALS

NCCCP sites are building the capacity to expand their clinical trials research infrastructure so that they can increase the number of patients accrued to clinical trials, increase participation by minority and underserved populations, and increase the types of trials that are available to patients, including earlier phase trials. Progress made in meeting these goals in year three include:

- Clinical Trials Screening and Accrual Log: The NCCCP network developed a web-based application for supporting real-time data collection of demographic information on patients considered for clinical trials. The NCCCP Clinical Trials Screening and Accrual Log contains information on patients who entered trials as well as those who did not. In year three, the log expanded in number and types of trials available at the sites, including a phase II trial, cancer control trials, and a tissue procurement trial. The tool has also been enhanced to include reporting capabilities to monitor progress and data integrity. Data analysis is enabling identification of individual and site accrual barriers, and creating opportunities to develop strategies to increase trial participation among patients.
- Underserved Accrual Project: NCCCP sites' patient navigators are studying ways to increase accrual of underserved patients to clinical trials. Navigators are providing clinical trial education materials to patients, and ensuring that clinical trials are discussed as a treatment option with all potential participants. The navigators record barriers and successes to clinical trial accrual and share them with their research teams for real-time project improvement.

• Cancer Tumor Staging Tool Kit: The NCCCP developed a tool kit to improve the consistency and accuracy of cancer tumor staging determinations, to help the sites use the Response Evaluation Criteria in Solid Tumors (RECIST) in clinical trials. The tool kit includes a reference guide to implement RECIST, and a template to standardize reporting and reference materials for staff education. All sites are measuring progress in RECIST activities, including sharing experiences with radiologists, RECIST process barriers, and best practices.

INCREASE QUALITY BIOSPECIMEN COLLECTION FOR RESEARCH THROUGH A STANDARDS-BASED APPROACH

The study of tissue, blood, and tumor cells collected from patients plays a critical role in translating basic science into targeted cancer treatments. However, researchers cite the lack of access to appropriately collected and annotated tissue as a major barrier to realizing the promise of personalized cancer medicine. In year three, the NCCCP made progress toward standardizing the way they collect and store biospecimens:

- Biospecimens Collection and Contributions to Research: The NCCCP sites have documented the requirements, infrastructure investment, and process changes necessary for a community cancer center to collect high quality biospecimens following NCI's Best Practices for Biospecimens Resources. Several sites have exceeded the NCCCP goal by actively contributing biospecimens for research purposes. Utilizing these best practices, all sites are in compliance with the formalin-fixation protocol for breast tissue; three NCCCP sites are participating in TCGA by providing high quality tissue; and five sites are participating in the Moffitt NCI-designated Comprehensive Cancer Center's Total Cancer Care biospecimen collection program.
- Biospecimen Handling Protocol: To support cultural considerations
 for the disposal of biospecimen donation, the NCCCP sites developed a
 model biospecimen handling and disposal protocol. These efforts were
 brought to the attention of the College of American Pathologists, which
 subsequently incorporated similar considerations into its guidelines that
 are currently being updated.

EXPAND INFORMATION TECHNOLOGY CAPABILITIES THROUGH ELECTRONIC HEALTH RECORDS (EHR) AND cabig $^{\circ}$

Information technology (IT) is a key enabler for improving quality of cancer care, enhancing cancer research, and supporting personalized medicine through its ability to build bridges required for data sharing and integration within and across cancer centers. NCCCP sites are leveraging the IT resources available through caBIG® – NCI's nationally networked research IT platform – to support activities such as clinical trial accrual, biospecimen collection, and clinical data analysis. NCCCP sites have made progress in the following areas:

- Adoption of caBIG® Tools: The NCCCP sites have met the program goal of developing a detailed deployment plan for connecting with caBIG® and working towards implementing an EHR. Several sites have adopted caBIG® tools, including caTissue (a biospecimen tracking and inventory management tool) and the National Biomedical Imaging Archive (NBIA), and are planning to adopt the caBIG® Clinical Trials Suite.
- Oncology-extended Electronic Health Records: In collaboration
 with ASCO and NCI, NCCCP sites have developed an oncology
 EHR requirements report for the development of an oncologyextended EHR for integrated use by private practice physicians,
 community cancer centers, and hospitals. The use of EHRs opens
 new avenues for data-intensive research in understanding cancer
 and for helping physicians and patients manage cancer care more
 effectively.
- National Cancer Research Data Network: Connecting NCCCP cancer centers to caBIG® strengthens the nationwide repository of voluntarily provided patient information. In year three, the sites worked to write a collective report on their experience in assessing caBIG® integration into a community cancer center setting. The report also addresses the IT business needs of community cancer centers and how best to establish technology strategies to support those needs.

20	110: A YEAR OF EXPANSION FOR THE NCCCP
Re of als	uilding upon the accomplishments of the NCCCP pilot and utilizing American ecovery and Reinvestment Act (ARRA) funds, in 2010 the NCI expanded the number participating hospitals to a total of 30 hospitals in 22 states. ARRA funding was so awarded to current NCCCP sites for projects to support NCI and NCCCP goals. camples of ARRA-funded projects to be implemented over the next two years include:
0	Clinical Trials: Sites are expanding their capacity to offer more clinical trials and earlier phase trials through program enhancement, including collaborations with NCI's Early Drug Development Program (EDDP) investigators. Sites are also studying ways to engage community physicians that serve large minority populations to promote clinical trials, including two sites that are developing and assessing strategies for enhancing the accrual of Native American patients.
٥	Cancer Health Care Disparities: Participating sites are expanding initiatives to study ways to improve the effectiveness of NCCCP community outreach programs in addressing cancer health care disparities. The sites have established partnerships with NCI's Community Networks Program (CNP) investigators to increase cancer screening for underserved populations.
	Quality of Care: NCCCP sites are expanding their infrastructure to support multidisciplinary care and conducting a study to evaluate the impact of multidisciplinary care on the processes and outcomes of cancer care. Sites' participation in ASCO's QOPI project was expanded to enhance the quality of data collection and improve activities by participating oncologists in private practice. Selected NCCCP sites are also participating in an international research project to evaluate the Patient Reported Outcomes version of symptom elements contained in the Clinical Trials Common Adverse Events reporting system (PRO-CTCAE). NCCCP sites are also studying ways to identify patients for genetic counseling and developing partnerships with state cancer plan coalitions to accomplish NCCCP's priorities.
٥	Survivorship and Palliative Care: Community cancer centers play a critical role in enhancing the quality of life of cancer survivors and in supporting cancer survivorship research. New projects focus on helping survivors transition to living with cancer after treatment and on smoking cessation among cancer survivors and their family members.

- □ Information Technology: Several NCCCP sites will use ARRA funding to implement NCI's proposed oncology-extended EHR. The participating NCCCP sites will either adopt the oncology-extended EHR to meet their oncology needs in an EHR, or work with their existing IT vendors to adapt their commercial solutions to the oncology EHR specifications.
- Biospecimens: The treatment a patient receives for breast cancer fundamentally depends upon the accurate evaluation of three biomarkers in the patient's cancer tissue. Guidelines for collecting and testing the tissue were established in 2007 and 2010. Comparing the sites' testing processes before and after the guidelines were published, NCCCP sites are studying if the accuracy of testing improved and if processes changed at their institutions.
- □ Communications: Cancer prevention, screening, treatment, and research initiatives are enhanced by effective communication programs. Sites are developing and implementing communications strategies, plans, and tactics to build awareness and support of NCCCP objectives for various community and public constituencies in their local communities.

A LOOK AHEAD

The NCCCP has accomplished many of the goals set out at the beginning of the three-year pilot phase (2007-2010). The pilot phase of the NCCCP was a period of foundation building – assessing what was possible in bringing a diverse network of community cancer centers together to achieve common research goals, and standardizing working procedures and data collection practices so that progress could be measured uniformly. The sites are currently summarizing their experiences and lessons learned to be shared with the new sites and with the broader cancer research community. Results of a formal evaluation will be available in 2011, allowing further refinement of the NCCCP.









Program Report spring 2011

Enhancing Access. Improving Quality. Expanding Research. Partnerships Drive Progress

Introduction

The National Cancer Institute Community Cancer Centers Program (NCCCP) is working to bring the latest scientific advances and evidence-based care within easy reach of cancer patients in underserved rural, suburban and inner-city locations across the United States.

Nearly 85 percent of U.S. cancer patients receive treatment in their local communities, where cancer care is often fragmented. The NCCCP is addressing ways to offer state-of-the-art coordinated care and to support a wide range of basic, clinical, and population-based cancer research.

The NCCCP network of 30 hospitals spans 22 states, sees 53,000 new cancer patients a year, and serves a population of 23 million Americans. Partnerships among the 30 NCCCP hospitals and with other NCI programs and national cancer research organizations have been instrumental in the network's success. NCCCP sites co-invest at least one dollar for every NCI dollar and share best practices to accelerate progress.

The commitment of funds, engagement by sites, and creation of NCCCP's strategic

partnerships have facilitated many of the accomplishments described in this report.

The NCCCP

The network sites are working to achieve the program's goals of:

- Enhancing access to care
- · Improving the quality of care
- Expanding research

This report highlights the progress of the 16 pilot NCCCP sites and describes the increased network activities with the addition of 14 new sites in 2010.

A comprehensive evaluation of the original 16 pilot sites will be completed by RTI International later in 2011.

30 Hospitals in 22 States

NCI launched the NCCCP pilot program in 2007 as a public-private partnership with 16 community hospitals. In 2010, NCI expanded the network with stimulus funding from the American Recovery and Reinvestment Act (ARRA) and added 14 sites.

NCCCP Hospitals



Enhancing Access

Reducing Cancer Healthcare Disparities

A major focus of the NCCCP is to reduce healthcare disparities and ensure that patients from underserved populations have the same access to quality cancer care and research studies provided to cancer patients with similar disease burdens. With 40 percent of total funding dedicated to disparities, this is a cross-cutting theme for all sites. Each cancer center has identified at least one underserved population from a racial or ethnic minority group or from a rural population and improved outreach activities tailored for those populations. Initiatives are also underway to reach the uninsured.

In addition, the network sites have:

- Implemented standardized tracking of race and ethnicity data
- Increased community and research partnerships focused on ways to address healthcare inequities for underserved populations
- Increased community outreach activities and screening events
- Increased patient navigation services to improve the coordination of cancer care, especially for underserved populations
- Increased the utilization of policies that incorporate cultural considerations related to donation of tissue and other biospecimens

Prioritizing Underserved Accrual to Clinical Trials

The network is working to increase clinical trial accrual rates for underserved populations. Sites are using tools to assess barriers to clinical trial participation by elderly, rurally-located, racial and ethnic minority patients. These groups, typically underrepresented, have disproportionately high cancer rates and historically low participation in clinical trials.

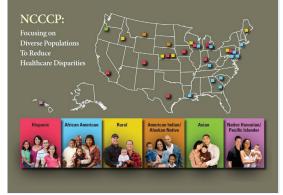
"We love our wide open spaces and the outdoors. That's why we live here. But when you get cancer, the distance to your doctor's door becomes a real problem." Cancer survivor Daryl Sather NCCCP Billings Clinic Cancer Center Billings, Montana

"When I was first diagnosed, my doctor gave me a few choices of where I could get treated. One of the big cancer centers was just too far away. I had a family and work to consider. I chose to get treated here because the doctors were highly recommended and because I wanted to be close to home."

Cancer survivor Daniel Cheeseman NCCCP Helen F. Graham Cancer Center at Christiana Care
Newark, Delaware

The sites' efforts to improve accrual rates include:

- Increasing the engagement of patient navigators who educate patients about clinical trials and serve as liaisons between patients and research teams
- Providing continued cultural awareness training programs, such as educational webinars, for hospital and cancer program staff
- Sharing best practices among the network sites and using resources from external experts in underserved accrual to promote the expansion of the clinical trials infrastructure



 Identifying specific underserved populations in local communities and developing program resources to reach patients from those populations

Improving Quality

Promoting Evidence-based Cancer Care

The sites are committed to improving the quality of cancer care they deliver by following evidence-based practice guidelines developed by national cancer organizations.

Significant accomplishments include:

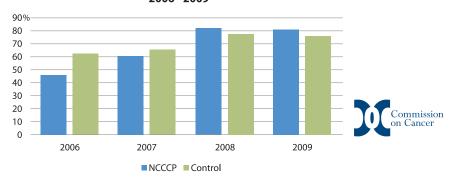
The NCCCP network of 30 cancer centers and their affiliated oncology practices have more than doubled their participation in the American Society of Clinical Oncology's (ASCO) Quality Oncology Practice Initiative (QOPI®) – a program that collects data and reports on measures from evidence-based guidelines, such as conducting pain assessments, providing smoking cessation support, tracking timeliness of chemotherapy administration, and providing psychosocial

"The NCCCP's commitment to quality of care will lead to fundamental changes in the clinical practice of oncology. The NCCCP sites and their affiliated oncology practices have assumed a leadership role to enhance the care of cancer patients using a model of quality measurement and feedback and participating with their fellow community cancer centers around steps leading to possible Quality Oncology Practice Initiative (QOPI®) Certification. They are optimizing cancer care and, one step at a time, making a lasting imprint on the quality of care they deliver." Terry Gilmore, RN and Pam Kadlubek, MPH QOPI® & QOPI® Certification Program American Society of Clinical Oncology

support. With each collection cycle, the network now selects the two disease-specific modules to be monitored. As of fall 2010, 25 NCCCP sites have oncology practices participating in QOPI® and five sites have achieved QOPI® certification through ASCO's national certification program.

 The 16 pilot sites continued to participate in the beta-testing of the Commission on Cancer's (CoC) Rapid Quality Reporting System (RQRS). RQRS allows real-time reporting using existing cancer registry operations to measure concordance with breast and colorectal cancer measures and supports ongoing quality assurance programs. A comparative analysis of NCCCP sites' performance with non-NCCCP sites is currently underway.

Median Hormone Therapy Performance Rates 2006 - 2009



Compared to other cancer programs involved in the RQRS initiative, NCCCP sites show higher concordance with the quality of care hormone therapy breast cancer measure. NCCCP (n = 16 hospitals), Control (n = 45 hospitals)

- The pilot sites added 27 new disease-specific multidisciplinary care (MDC) conferences, where oncologists, surgeons, radiologists and support staff meet to discuss individual cases to determine personalized, optimal treatment plans. All NCCCP sites are working to increase prospective case reviews and sites are using a network-developed assessment tool to evaluate and improve their current MDC programs.
- All network sites are promoting the use of evidence-based approaches for the integration of
 genetic and molecular testing into the model of cancer care in their centers and they are using
 the NCCCP-Cancer Genetic Counseling Assessment Tool to evaluate their cancer genetic
 programs, set improvement goals, and exchange information with other NCCCP sites.

Read more about the sites' efforts to expand multidisciplinary care in the January/February 2011 issue of *Oncology Issues*. The publication contains the first few articles in the journal's series about the NCCCP. The published articles are available on the NCCCP website [http://ncccp.cancer.gov].

Expanding Cancer Survivorship and Palliative Care Programs

To improve cancer treatment and follow-up care, the NCCCP network is expanding survivorship, palliative care and psychosocial programs and services for all cancer patients. Sites are increasing the use of patient treatment summaries to facilitate communication among the cancer treatment team, the patient, and the patient's other healthcare providers. In 2007, only 25 percent of the original pilot sites had considered use of patient treatment summaries; now, more than 60 percent of the original 16 sites generate these forms for patients and providers. The summaries also guide the development of post-treatment survivorship care plans.

The sites developed and utilized psychosocial and palliative care assessment tools to evaluate their respective center's ability to provide quality care in these areas.

Read more about NCCCP pilot sites' efforts to develop and deliver treatment summaries to patients and their physicians, and post-treatment survivorship care plans in the May/June 2011 issue of *Oncology Issues*. The articles will be available on the NCCCP website [http://ncccp.cancer.gov] after publication.

Implementing Electronic Health Records

Oncology care most often begins in general practices and surgical domains, moving through diagnostic testing, and proceeding to cancer care therapies, such as radiation and chemotherapy administration. Cancer care providers must access complete patient records in order to support individualized care. Integrated Electronic Health Records (EHRs) are essential to supporting quality cancer care due to the longitudinal nature of the cancer continuum. At the completion of the pilot period, the original 16 NCCCP sites were able to access patient records through EHRs, yet these EHRs lacked oncology-specific fields and workflow support. Leveraging the Clinical Oncology Requirements for EHR documentation created by NCCCP sites in collaboration with ASCO and NCI, the expanded NCCCP network is working to improve platforms for oncology care.

Expanding Research

Increasing Patient Participation in Clinical Trials

NCCCP sites are supporting cancer research by enhancing infrastructures to increase patient accrual to clinical trials, with an emphasis on the accrual of patients from underserved populations. Use of NCCCP's web-based Screening and Accrual Log allows the network to identify barriers to clinical trial accrual in real time and target interventions to overcome those barriers. Other resources, including the Minority/Rural Matrix and Clinical Trials Best Practice Matrix, enable sites to document accrual challenges, measure program improvements, and collectively focus efforts on strategies to expand the clinical trial infrastructure.

The NCCCP sites' efforts to increase patient accrual to clinical trials include:

"The NCCCP network has been invaluable in our research program to evaluate the newly developed patient version of the Patient Reported Outcomes Version of the Common Terminology Criteria for Adverse Events (PRO-CTCAE). The five participating NCCCP sites in the ongoing PRO-CTCAE national validation study have provided access to patient participants in the community with diverse backgrounds and performance status levels. Enrollment at NCCCP sites has been brisk and efficient - over 150 patients in fewer than three months. NCCCP sites have been active partners during the study, with staff providing feedback and responding to our feedback via weekly, well-attended conference calls. The NCI staff overseeing the NCCCP component of this study has also been vital to its success, facilitating constant communication between sites and investigators and resolving gueries quickly. It has been a pleasure conducting a study in this network, which has provided an ideal real-world context for testing the PRO-CTCAE.

Ethan Basch, MD Principal Investigator, PRO-CTCAE Study Memorial Sloan-Kettering Cancer Center

- Twelve sites have partnered with NCI-designated Cancer Centers to offer their patients access to Phase I and Phase I/II clinical trials, with additional sites developing the infrastructure and partnerships to do the same.
- The sites have broadened their clinical trials portfolio, increased supportive care/ cancer control and prevention trials, increased Cooperative Group membership, and increased the number of local physicians accruing patients to clinical trials.

Read more about NCCCP initiatives to increase accrual to clinical trials in the March/April 2011 issue of *Oncology Issues*. The published articles are available on the NCCCP website [http://ncccp.cancer.gov].

"For several years, we have been partnering with several NCCCP sites, mainly in the areas of conducting Phase II clinical trials, and in a major approach to personalized cancer care called 'Total Cancer Care' (TCC). This latter project involves enrolling patients in a large prospective, observational study which includes acquiring biospecimens from patients for molecular profiling and clinical data with the goal of 'providing the right treatment for the right patient at the right time.' Our colleagues at the NCCCP sites have proven to be outstanding contributors and have been involved in the design and implementation of the TCC study. Participation by our community colleagues is critical to the development and delivery of personalized cancer care and evidence-based medicine, and ultimately benefits patients by improving access to research and quality care. It is a privilege for Moffitt investigators to be able to partner with our colleagues at NCCCP sites."

William Dalton, MD, PhD

President/Chief Executive Office Moffitt Cancer Center

Promoting High-quality Biospecimen Collection

To advance cancer research, NCCCP sites are actively participating in the collection of high-quality biospecimens using standardized collection and storage procedures. This is helping to build a community-based research platform where patient data and high-quality blood and tissue samples are collected to support genomically-informed medicine.

- Eight sites follow NCI Best Practices for Biospecimen Resources for the collection and storage of high-quality biospecimens.
- Eight sites participate in biospecimen research programs: five sites are affiliated
 with Moffitt Cancer Center's Total Cancer Care program and three sites work with
 The Cancer Genome Atlas, a collaboration of NCI and the National Human Genome
 Research Institute.

Expanding Community-based Bioinformatics Infrastructure

NCCCP sites are working with and participating in caBIG® – NCI's nationally networked research information technology platform – to leverage standards-based best practices and provide insight into the nuances of community-based informatics programs while helping to build documentation more suited to the community segment. The 30 sites have gained access to a network of oncology informatics expertise to solve both common and unique technology issues, while also receiving guided access to the tools through caBIG® and other program solutions. The sites continue to work on a number of efforts to implement informatics tools to support improved cancer care in the community and to facilitate data sharing activities in support of research efforts.

A few of these include:

- Participation in a collaborative project to network with and exchange technology and informatics best practices with the NCI-designated Cancer Centers through the NCI caBIG® Deployment Program
- Collaboration with NCI's Cancer Imaging Program and the Center for Biomedical Informatics and Information Technology (CBIIT) to demonstrate electronic data submission for clinical trial imaging data through annotated image exchange using the National Biomedical Imaging Archive
- Initiation of a project with NCI's CBIIT to define community-based oncology
 outcomes data elements to support data warehousing and outcomes data analysis
 capabilities; NCCCP sites are working to create data warehouses, build longitudinal
 patient records, and develop strategies to engage private practice oncology
 providers in data sharing.

Connecting
Collaborating
Contributing

NCCCP: Partnerships Drive Progress

The NCCCP network provides a platform for collaboration with a number of national cancer organizations to enhance the goals of the organizations as well as the NCCCP.

An overview of program partnerships includes:

- American College of Surgeons Commission on Cancer NCCCP sites
 participated as beta sites in the RQRS initiative to show how being part
 of a network can accelerate progress in improving adherence to evidencebased guidelines.
- American Society of Clinical Oncology The NCCCP has developed partnerships for a quality initiative (QOPI®) and for a collaboration on a white paper on oncology-specific EHR requirements.
- Linkages with NCI-designated Cancer Centers NCCCP sites have increased the number of relationships with NCI-designated Cancer Centers (including Cooperative Group programs). These linkages support NCCCP's overall goal to bring higher quality, state-of-the-art cancer care to patients in their communities. Activities include: early drug development programs, clinical trials affiliations, and communications, disparities, and biospecimen initiatives.
- NCI Center to Reduce Cancer Health Disparities (CRCHD) Community
 Networks Program (CNP) NCCCP sites have relationships with nine CNP
 organizations that conduct research projects to address healthcare disparities in
 specific underserved populations.

NCCCP: Expanding Research Through Federal Stimulus Funding

In addition to supporting the 2010 expansion of the NCCCP program from 16 to 30 cancer centers, government stimulus funds have been used to retain 42 staff positions at NCCCP sites and create 206 full-time equivalent positions at the 30 participating sites.

ARRA funds have also been used to develop several research programs at network sites to:

- Create additional partnerships with NCI's CRCHD-CNP to increase cancer screening events in racial/ethnic minorities and other underserved populations
- Improve the coordination of care for underserved populations across the cancer care continuum
- Participate with five NCI-designated Cancer Centers in the preliminary validation of the Patient Reported Outcomes – Common Terminology Criteria for Adverse Events measurement tool
- Improve the navigation of patients during the transition from cancer care to survivorship
- Expand access to evidence-based smoking cessation programs for cancer survivors and their family members
- Conduct a study on the impact of multidisciplinary care on processes and outcomes of cancer care
- Facilitate access to early phase trials through collaborations with the NCI Early Drug Development Program
- Engage community physicians in minority communities to enhance clinical trial accrual
- Research breast cancer bio-marker practice changes
- Identify strategies to enhance clinical trial participation among Native Americans
- Partner with state cancer coalitions to implement mutual objectives in state cancer plans

Communications and Patient Advocacy: Connecting Patients With Care

Cancer treatment advances are limited if they are out of reach – or if patients don't know they are available. Each NCCCP site is working to enhance community awareness of cancer-related issues and the role of the NCCCP in their communities.

Communication efforts include:

- Supporting initiatives to increase cancer screening and early detection with a focus on underserved populations
- Developing lay language educational materials and programs to promote increased accrual to cancer clinical trials
- Educating local oncologists about the NCCCP to increase participation in MDC conferences, clinical trials, and other program components

An integral part of the NCCCP has been its linkage to local advocacy groups through representation by members of the NCI Director's Consumer Liaison Group (DCLG) on the NCCCP Program Advisory Committee. Resources developed by the DCLG, such as materials to promote biospecimen donation, are made available to the network sites. This advocacy association ensures the perspective of cancer patients is considered in all aspects of the NCCCP. The connections with the patient and community perspective continue to provide ongoing direction to the NCCCP program to support its central purpose of improving patient outcomes and research opportunities for patients in diverse communities across the United States.

Promoting NCCCP Contributions to Community-based Cancer Initiatives

The NCCCP is working to develop resources and tools that are applicable to a broad range of community-based cancer programs. During the past year, NCCCP representatives have published papers in various journals, posted resources on the NCCCP website, and made presentations at several national meetings, including: American Society of Clinical Oncology (June 2010 and June 2011), Center for Medical Technology Policy (November 2010), NCI-designated Cancer Centers Directors' Retreat (February 2011), Association of Community Cancer Centers (March 2011), NCI Institute of Medicine National Cancer Clinical Trials System Workshop (March 2011), American College of Healthcare Executives (March 2011), and Cancer Center Administrators Forum (April 2011).

This report reflects the work and contributions of hundreds of individuals at the NCCCP sites, the NCI, ASCO, the Commission on Cancer, and several NCI-designated Cancer Centers. The NCCCP demonstrates that partnerships can drive progress toward the goals of improving the quality of cancer care and accelerating cancer research to improve outcomes for patients across the United States.







NIH Publication No. 11-7773 Printed April 2011







Enhancing Cancer Research in the Community

Introduction

The National Cancer Institute Community Cancer Centers Program (NCCCP) completed its fifth year in June 2012 with 30 community hospitals in the network. Working as a learning collaborative, the NCI and the network sites continued to focus on the program's efforts to enhance access, improve quality, and expand research in the community setting - the program's ultimate goal.

This report highlights the network level activities

and research partnerships that helped to support

the achievement of program goals. To illustrate the NCCCP's progress, we include several stories through the lens of the local community hospitals. Each story reveals how NCCCP research initiatives led to changes at the hospitals, demonstrating that the network sites are able to conduct a broad range of research projects.

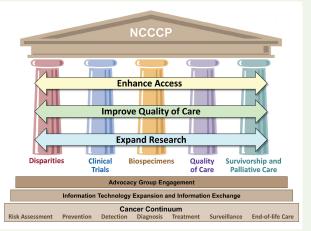
There are many areas of progress throughout the network. The results shared here are based on site self-reported data unless otherwise noted. The report provides several accomplishment overviews, a timeline with program milestones, site stories and quotes from various collaborators. Collectively, these show the contributions of the NCCCP network to the NCI's research mission.

Enhancing Access

A cross-cutting theme of the program is to reduce healthcare disparities across the full cancer continuum. All NCCCP sites are focused on addressing disparities in each of the program components (i.e., clinical trials, quality of care, survivorship and palliative care, information technology, biospecimens, and communications). From increasing community outreach activities and screening events, to tracking race and ethnicity data, to promoting increased accrual of underserved populations to clinical trials, the network sites are working to enhance access to cancer care and cancer research for underserved populations. In the past year, a rural initiative was launched and three webinars

NCCCP Pilot Program Evaluation:

Research Triangle Institute (RTI) International recently completed an independent evaluation of the NCCCP pilot phase (2007-2010). The comprehensive review of the pilot program's 16 community hospitals and RTI's findings are included in a final evaluation report that will be posted to the NCCCP website (http:// ncccp.cancer.gov/about/reports-and-tools.htm).



"We have educated 239 Pacific Islander adults who showed significant increases in their knowledge and beliefs about colorectal cancer screening (with knowledge increases predicting intent to get screened). Perhaps most importantly, we learned so much from our NCCCP partner St. Joseph Hospital of Orange about how to create sustainable clinical systems for our medically underserved populations

Sora Park Tanjasiri, DrPH, MPH WINCART CNP Principal Investigator California State University, Fullerton were developed by the sites to address challenges and successful strategies for the following areas: frontier and remote access, patient education, and transportation and lodging. Key areas of activity reported by the sites are:

- Increasing Cancer Disparities Research: Through formal partnerships with disparities research programs such
 as NCI Community Networks Program (CNP) grantees and expanded use of evidence-based approaches, the
 sites were able to conduct a variety of disparities research projects.
- Engaging Underserved Populations through Community Partnerships: Sites report that more than 2,400 community partnerships are in place, with many of them serving the following populations: African American (n=251), Hispanic (n=337), rural (n=216), uninsured (n=333), and the poor (n=384). Sites also formed many community advisory boards to help develop strategies to reach minority and underserved communities.
- Conducting Screening Events: Between April 2011 and March 2012, sites conducted more than 3,200 screening
 events (1,974 breast, 498 colon, 208 prostate, 581 other) and screened over 147,000 community residents,
 helping to bring more patients into the system of care earlier. For the breast cancer outreach events, sites
 reported 128,371 individuals were screened; 14,635 had abnormal findings and 1,453 were diagnosed with
 breast cancer.

Spartanburg Regional Hospital: Benefitting from Disparities Research Partnerships

"We have completely changed the way our hospital connects with underserved populations."

-James Bearden, MD, FACP, NCCCP Principal Investigator, Spartanburg

With the site's 2010 award for an American Recovery and Reinvestment Act (ARRA) Disparities Project, Spartanburg Regional Hospital formed a formal research partnership with the Community Networks Program (CNP) Center at the University of South Carolina (USC), the South Carolina Cancer Disparities Community Network, to implement the Witness Project® - a culturally informed, community-based breast and cervical cancer education program for African American (AA) women. The initiative promoted the use of community-based participatory research principles and fostered new approaches, most significantly through connections with over 200 faith communities.

"The agendas for our meetings with underserved groups completely changed. We used to organize them like hospital meetings, but we began to structure them more like a church service – with greeters, an opening invocation, and a gospel song. We even began to serve the participants food, rather than have the refreshments available for self-service," explained Lucy Gansauer, NCCCP director at Spartanburg's Gibbs Cancer Center. "We are now modeling all of our community programs based on lessons learned from the CNP partnership," informed Dr. James Bearden, principal investigator (PI) for the NCCCP hospital.

Spartanburg's successful partnership with the CNP led to additional collaborations and funding sources for research studies. "The partnership between USC and Gibbs Cancer Center has emerged as a model in our state," said Dr. James Hébert, the CNP Pl. "Our coming together around a shared vision has been pivotal in the planning and implementation of our multi-phased research study to understand the knowledge and attitudes of AA men and women about prostate cancer risk factors, screening, and participation in clinical trials and other research."

Dr. Daniela Friedman, co-investigator and pilot project leader for the CNP study, said that the Gibbs team "played a key role in recruiting 109 AA men and women for the pilot prostate education study and 31 AA men for a second study examining community perceptions about a prostate cancer survey. Without our partnership, it would have been exceedingly difficult to effectively meet project goals."

Noting that the hospital believed it was addressing disparities and conducting outreach efforts before NCCCP involvement, Dr. Bearden acknowledged the significant growth stemming from network participation and the program's requirement to expand partnerships. "It was in Year 3 that the light bulb really turned on and we realized we needed to change the way we were doing things." They are now reaching two-and-a-half times more people than before and are bringing more patients into the system of care earlier through screenings. He continued, "We are seeing the benefits of our engagement with the community and reaching more patients with cancer." As one example, since the expanded navigation and outreach efforts were launched, the mobile mammography program targeted to underserved populations in two counties has seen a 62% increase in the number of individuals (n=2,647) screened from FY11 to FY12. Dr. Mark Monson, Spartanburg's diagnostic radiologist, reports, "The mobile unit is detecting a higher number of patients diagnosed with breast cancer (7.6 per 1000) in this population compared to the hospital's fixed facility mammography locations (4.7 per 1000). We know we are reaching many women who have never been screened before, or were not getting routine screenings."

Using evidence-based approaches and following principles of community-based participatory research can be time-consuming, challenging, and not necessarily profitable, yet the organization is committed to maintaining the required resources after ARRA funding. Dr. Bearden explained, "We realize this is the most effective way to work with our community if we are going to make a change in cancer statistics for underserved populations. Not only are we bringing more underserved patients into the system of care earlier, we are increasing accrual to trials and expanding research opportunities for them."

Improving Quality

To improve the quality of cancer care provided in the community setting, NCCCP sites are increasing the use of evidence-based guidelines, utilizing a multidisciplinary model of care, and participating in two national quality reporting initiatives: (1) the American College of Surgeons Commission on Cancer (CoC) Rapid Quality Reporting System (RQRS), and (2) the American Society of Clinical Oncology's (ASCO) Quality Oncology Practice Initiative (QOPI®). The pilot sites were members of the beta test phase for the CoC RQRS, a real-time cancer registry tool to prospectively monitor adherence to National Quality Forum-endorsed

Northside Hospital's Quality of Care Research Collaboration

With a grant from the American Cancer Society, Northside is collaborating with Emory University's Winship Cancer Institute on a study aimed at improving the quality of care for breast cancer patients. The goal of the grant is to reduce disparities and eliminate barriers to effective breast cancer care through a multi-level intervention that combines patient navigation and utilization of the CoC RQRS patient management database. RQRS provides Northside's navigators with alerts to trigger patient navigation intervention so staff can more effectively assist patients who are experiencing barriers to care or delays to treatment. Northside has been involved with implementing the research protocol and is providing Winship with access to patients.

measures for breast and colorectal cancers. This effort also laid the foundation for network participation in research projects that are highlighted below. As of June 2012, 18 NCCCP sites are participating in the CoC's RQRS and the other network sites are working towards RQRS participation. For ASCO's QOPI® - an oncology practice-based quality improvement program – participation by the sites is supporting a network data sharing quality initiative. There were 25 sites with affiliated practices participating in QOPI® during the Spring 2012 round of data collection and 11 of those practices had achieved QOPI® certification.

Building network level partnerships and projects helped to advance the NCCCP's goal of improving the quality of cancer care. Significant activities and accomplishments include:

Genetics Performance Improvement
Project: Fourteen sites participated in a
project aimed at increasing the number
of cases referred for genetics counseling
services for either breast or colorectal
cancer. Collecting and reviewing data
monthly, sites were able to identify
areas for improvement in the referral
process, share data with cancer center
management, and chart plans for future
enhancements to genetics programs.
For example, universal screening for

"The NCCCP sites have shared their invaluable experience, insight into best practices, and recommended enhancements, allowing the CoC to develop and improve the Rapid Quality Reporting System for the benefit of the entire community of CoC-accredited cancer programs. The CoC looks forward to continuing its collaboration with the NCCCP sites, sharing the common goal of improving the quality of care provided to cancer patients close to home."

Erica J. McNamara, MPH, Quality Improvement Information Analyst Andrew Stewart, MA, Senior Manager NCDB Commission on Cancer

Lynch syndrome is now being implemented at many of the sites and several are focusing on patient education, particularly for colorectal cancer patients, to increase knowledge regarding genetic screening guidelines.

- Multidisciplinary Care Study: Sixteen sites are participating in an ARRA-funded quality
 research study to conduct a preliminary study of the relationship between specific
 multidisciplinary care (MDC) assessment areas and selected processes and outcomes of
 cancer care. The study is open for enrollment through September 2012 with data collection
 continuing through December 2012.
- ACS RQRS Symptom Surveillance and Disparities Study: Fourteen sites are participating in
 the American Cancer Society's Patient-Reported Outcomes study. Working with ACS and the
 CoC, this project is pilot testing a cost-effective method for collecting patient reported data
 on symptom experiences and investigating disparities in symptom burden and management.

The study's goal is to recruit 1,500 breast and colon cancer patients; over 900 patients have completed surveys for this project to date.

Completion of the PRO-CTCAE
 Study: Five NCCCP sites, along
 with four NCI-designated Cancer
 Centers, participated with Memorial
 Sloan-Kettering in a validation study
 to test the NCI Patient-Reported
 Outcomes Version of the Common
 Terminology Criteria for Adverse
 Events (PRO-CTCAE). Dr. Ethan
 Basch at Memorial Sloan-Kettering
 Cancer Center was the project PI.
 The NCCCP sites accrued 536
 patients to the study, 25% of them
 minorities, and all sites met their
 accrual goals.

"The side effects of cancer treatment can be as difficult to endure as the disease itself. Many symptoms go under-reported or undertreated, leading to unnecessary suffering, impaired quality of life and functioning, and loss of treatment adherence.

The NCCCP is providing a real-world platform for a study of patient-reported symptom experiences. The NCCCP's focus on disparities and the sites' diverse patient populations enhance the ability to accrue samples containing medically underserved groups. The NCCCP's commitment to supporting research in the community setting improves the external validity of research and shortens the distance from research to application. The NCCCP provides a mechanism for conducting research that is fundamental to translating research findings into improved care for cancer patients."

Tenbroeck Smith, MA, Sr. Behavioral Scientist Kevin Stein, PhD, Intramural Research Eilsabeth Ward, PhD, Intramural Research American Cancer Society

Survivorship & Palliative Care

The sites continue to expand survivorship and palliative care services through increased use of patient treatment summaries, implementation of survivorship care plans, integration of palliative care resources in the cancer programs, and incorporation of processes to deliver psychosocial screening, care and referrals. Key activities reported by the sites include:

- Implementing CoC 2015 Program Standards: All sites are striving to be early adopters
 of the 2015 CoC requirements specific to survivorship and palliative care program
 standards. The new CoC standards are
 reflective of NCCCP pilot program initiatives.
- Collaborating with Research Studies:
 NCCCP sites have been able to provide extramural research partners with access to community-based clinicians and survivors treated in the community setting.
- Improving Capacity to Deliver Psychosocial
 Care: Sites used an NCCCP-developed tool
 to assess components of their psychosocial
 care programs and are using the information
 to develop processes to address gap areas
 and implement services, such as distress
 screening with a standardized tool.

"As a health services researcher at Memorial Sloan-Kettering Cancer Center, I have excellent opportunities to study how survivorship care is delivered at a large urban comprehensive cancer center. However, it is hard from my vantage point to study how the vast majority of cancer survivors receive care — in the community.

Fourteen of the NCCCP sites are participating in a survey of oncology providers to better understand attitudes toward providing survivorship care plans to cancer patients. The investigators at each site have facilitated the enrollment of over 200 oncology providers who have completed the survey – an impressive response rate of over 70%.

This will contribute to a high-quality research study from a large, geographically diverse sample. Ultimately, this study will provide critical data elucidating the challenges and benefits of providing survivorship care plans to cancer survivors."

Talya Salz, PhD, Assistant Attending Outcomes Research Scientist Health Outcomes Research Group

Memorial Sloan-Kettering Cancer Center

Hartford Hospital's Tobacco Cessation Study

"We learned from NCCCP that success and sustainability comes from embedding change into the care practices of our organization." -Andrew Salner, MD, NCCCP Principal Investigator, Hartford Hospital

After receiving ARRA funds for a project on tobacco cessation, Hartford Hospital's Helen & Harry Gray Cancer Center turned the project into an IRB-approved research protocol. The hospital's evidence-based model for cessation treatment*, previously developed for cardiac patients and pregnant smokers, was adapted for use with cancer patients and broadened across the organization, to its satellite sites and into physician offices and the community. The hospital's goal was to recruit patients and family members into the study, use the findings to improve the intervention, and ultimately weave the approach into their system of patient care.

With the tobacco cessation study, project leaders recognized that multiple caregivers and non-clinicians would need to make program referral part of their practice to achieve success. "An amazing part of the NCCCP journey," noted Dr. Andrew Salner, "has been that we have learned to think about initiatives such as survivorship care in so many different ways in order to learn how to implement them and help them become part of our routine practices."

Research Project Overview

Use tablet-based intake and a distress thermometer; conduct 90-minute "motivational" and planning interview; encourage use of nicotine replacement therapy and cessation medicines as aids to behavior modification when appropriate.

Perform bi-monthly follow-up calls for telephone support; monitor carbon monoxide levels at 2 and 6 months post-interview.

To date: 100 patients served, 46 enrolled in study (includes 7 family members), 24 completed study, 4 stopped smoking, 7 reduced smoking rates.

A key part of the program success has been the addition of a behavioral psychologist with research experience and the availability of a full-time dedicated smoking cessation interventionist who is able to respond to staff as well as patients. "Physicians are so busy that we wanted to make it easy for them to refer patients," said Dr. Salner. Systematic processes were developed to offer multiple paths for referral and clinical and non-clinical staff were educated about the program. Based on the success to date, hospital management has committed to sustaining the program and the intervention, making it part of their care processes.

*Original model selected as one of NCI's Research Tested Intervention Programs: http://rtips.cancer.gov/rtips/programDetails.do?programId=312134.

Penrose Cancer Center - Colorado Cancer Coalition Cancer Survivorship Research Study

"We are responding to the needs of rural and elderly cancer patients with an exportable survivorship program." -Judy De Groot, RN, MSN, AOCN, Oncology Nurse Navigator, Penrose Cancer Center

Recognizing that survivorship programs are often difficult to attend, particularly for patients living in rural communities, Penrose Cancer Center has used its ARRA funds for a state cancer plan collaboration with the University of Colorado Comprehensive Cancer Center (UCCC) in a research study that includes two other community-based cancer centers in Colorado.

The study, called C-STEPS (Cancer Survivorship Telephone Education and Personal Support Program), is a pilot project that aims to provide both psychosocial and health promotion services to cancer survivors without requiring them to return to the treatment institution. According to Kathleen Garrett, program manager at UCCC Cancer Prevention and Control, "A fundamental premise of the C-STEPS project is that it is plausible to develop and deliver a convenient and exportable intervention that does not require return visits, where such visits can pose access barriers.

The C-STEPS research study involves telephone education and support services, based on evidence indicating that the telephone is an effective medium for delivering support interventions to cancer survivors. Judy De Groot, oncology nurse navigator at Penrose, explained that patients, especially those who live in distant rural communities, are "excited about the additional opportunity for post-treatment support."

The study design will allow UCCC to evaluate C-STEPS uniformly across urban and

rural geographic areas of Colorado. Kathleen Garrett credits the NCCCP site with

advancing the project. She notes, "Fundamental to our success so far in implementing C-STEPS has been our relationship with Penrose. Through our collaboration, we are not only given access to a demographically diverse cancer survivorship population but we are also able to implement this pilot program in a very 'real world' and patient-centered care setting." Additionally, Ms. Garrett attributes the study's successful accrual to the UCCC/Penrose partnership.

Introduction to the C-STEPS program has become a standard part of the survivorship discussion at the NCCCP site and Penrose will continue to offer the program to cancer survivors as part of its care model, even though the project's ARRA funding has ended.

Research Project Overview

Eligible patients are educated about/offered the C-STEPS program.

C-STEPS psychosocial oncology counselors call consented patients, discuss stress management, provide emotional support, offer suggestions to improve diets and lifestyle choices, and help plan appropriate medical follow up.

Patients complete a questionnaire about their experience with the post treatment support.

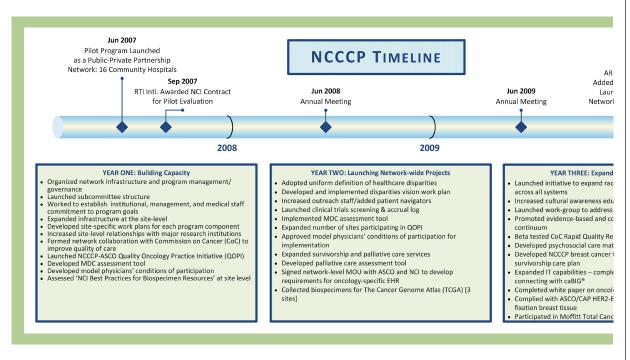
Expanding Research

With the accelerated speed of scientific discoveries and rapidly changing advances in technology, the NCCCP sites are continuing efforts to become research-ready organizations. The NCCCP has helped participating community hospitals enhance research capacity within their cancer centers. Several external organizations and investigators have reached out to NCCCP sites, developing partnerships for study recruitment and/or research contributions. Additionally, many sites have formed relationships with NCI Community Networks Program (CNP) Centers and are participating in research studies with the goal of reducing cancer health disparities through community-based participatory education, training, and research among racial/ethnic minorities and underserved populations.

Biospecimens

Advancement towards complete implementation of *NCI Best Practices for Biospecimen Resources* improved capabilities and contributed to recognition of NCCCP sites as valuable research partners in accruing high-quality specimens. The community hospitals are able to participate in biospecimen initiatives that will advance the NCI research agenda. For example, six sites are participating in biospecimen collection trials for Moffitt Total Cancer Care™ and nine sites have agreements to serve as biospecimen source sites for The Cancer Genome Atlas (TCGA). Other key research capability expansion efforts include:

CAP Collaboration to Identify the Pre- and Post-analytic Variables Needed for the
Creation of High-quality Biospecimens for Patient Care and Cancer Research: The NCCCP
Biospecimens and IT Subcommittees are working with the College of American Pathologists
(CAP) to identify all the necessary pre-analytic and post-analytic variables that need to be



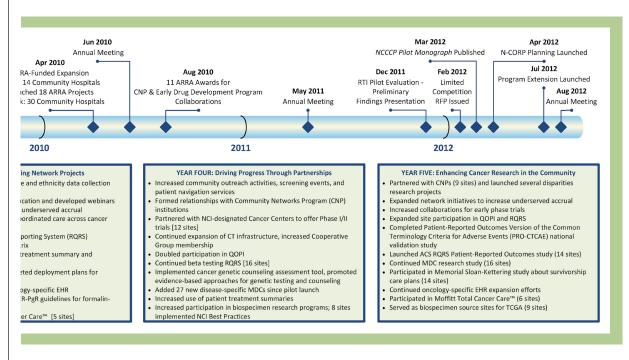
documented in the patient's record in order to create high-quality biospecimens for both patient care and cancer research. This initiative will include working with the major laboratory information system (LIS) vendors to automate the collection of these necessary pre- and post-analytic variable data fields as well as coordination with CAP's electronic Cancer Checklists.

Enhancing Tissue Management Infrastructures:
 Sites are improving local standard operating
 procedures and enhancing infrastructures to
 extend capabilities, improve quality, and expand
 participation in national biospecimen initiatives
 and research efforts, including participation in
 the national case report form harmonization
 effort being led by NCI.

"Our cancer center's participation in NCCCP has significantly enhanced our organization's research commitment to supporting translational science. Our ability to contribute specimens to TCGA and partner with the Wistar Institute, the University of Delaware and the Kimmel Cancer Center at Thomas Jefferson University are directly related to NCCCP network participation.

We have collected over 3,000 high-quality biospecimens for more than 15 different cancer types, showing that community hospitals can be a valuable research partner for the NCI and other academic research programs."

Nicholas Petrelli, MD Bank of America Endowed Medical Director **Helen F. Graham Cancer Center at Christiana Care**



Clinical Trials

Newly identified cancer molecular subtypes and new knowledge about cancer genetics are driving changes in the infrastructure required to conduct early-phase clinical trials. One of the NCCCP goals has been to increase capacity for the community hospitals to participate in early phase trials, thereby offering more treatment options to patients closer to their homes. Collaborations with NCI-designated Cancer Centers, Cooperative Groups, industry partners and access to more Phase II trials on the Cancer Trials Support Unit have helped sites participate in more Phase II trials. Combined with the program's disparities focus, NCCCP sites are also working on approaches to increase patient participation in clinical trials – particularly for patients from underserved populations – to provide a broader base for cancer research. Over the past year, the sites broadened their clinical trials portfolios and opened more early phase trials. Also of note, the network sites:

- Focused Efforts of the Clinical Trials
 Underserved Accrual Working Group: Emerging
 from a special session on underserved accruals
 at the 2011 NCCCP Annual Meeting, this group
 established metrics and began to collect data in
 three specific areas: (1) physician and community
 outreach related to clinical trials, (2) navigator/
 clinical trials research team coordination, and
 (3) strategies to translate informed consent
 documents to other languages. Emphasis on
 these metrics is improving awareness and
 focusing efforts to promote underserved
 accruals at the site level; for example, navigators
 are attending MDCs. The metrics will continue to
 be refined and monitored over the coming year.
- "Discovery and development of newer therapies for patients with cancer is the main goal of the University of Wisconsin Carbone Cancer Center Phase I Research Program. Our partnership with NCCCP site Sanford Medical Center has allowed us to provide early phase clinical trial options to Sanford Medical Center and the under-represented population that they serve. The future of cancer therapy involves genotyping tumors and personalizing therapy, thus including under-represented populations will allow us to better understand and tailor treatments for individual patients."

George Wilding, MD Director, University of Wisconsin Carbone Cancer Center

- Increased Racial Minority Accruals to Clinical Trials: Along with an increased number of overall accruals to
 clinical trials, sites have increased racial minority accruals to NCI-sponsored Division of Cancer Prevention
 (DCP) and Cancer Therapy Evaluation Program (CTEP) treatment, prevention, and supportive care/quality of
 life trials. The NCCCP-developed Minority/Rural Matrix has guided sites in the identification of their minority/
 underserved populations and helped to assess their strengths and weaknesses related to reaching and accruing
 these patients.
- Developed a Clinical Trials Best Practice Matrix: This tool contains nine elements for sites to assess their clinical trials infrastructure. The sites completed the matrix in spring 2011 to establish a baseline assessment and then again in June 2012. An analysis of results using site self-reported data has shown that sites increased their mean score on the tool from 19 to 21 (possible score range: 9 27) and early findings suggest that sites with a mean score of 21 or above have twice the average number of accruals compared to sites with lower mean scores. Additionally, over the past year, the number of sites with a Level I rating (the lowest of three level ratings) for their underserved accrual and outreach decreased by 50%. The matrix is being evaluated for possible tool validation and broader dissemination for community cancer centers to use as a roadmap for program improvement.

St. Joseph's/Candler: A Multi-faceted Approach to Promoting Underserved Accrual to Clinical Trials

"To get the patients who are most difficult to reach on clinical trials, we needed a cross-cutting tactical plan that was monitored weekly."

—H.A. Zaren, MD, FACS, NCCCP Principal Investigator, St. Joseph's/Candler

"It all begins with knowing who you serve," said Dr. Zaren, NCCCP principal investigator for the Nancy N. and J.C. Lewis Cancer & Research Pavilion at St. Joseph's/Candler. Spanning a 28 county service area, with 21 of those classified as largely rural, the population of the hospital's primary service area of Chatham County is 40% African American. The hospital sponsors two clinics that provide access to the underserved and conducts many outreach activities, yet new strategies were needed to increase accrual of underserved patients to trials.

"We began," explained Dr. Zaren, "by identifying the barriers and then used a cross-cutting approach to develop a tactic for each barrier." Adding patient navigators, supporting culturally appropriate education on clinical trials, and building partnerships with community based volunteer lay navigators has helped to improve the patient knowledge base which, in turn, has increased the number of patients screened for trials. Partnerships with community organizations and many African American churches are strategic methods for reaching patients and increasing African American accruals.

The cancer center launched systematic efforts to link patients to 'medical homes' and to convince physicians that patients seen in outpatient settings need access to cancer screenings. The hospital committed to minimizing physician risk by taking responsibility for follow up required for patients with a positive screening test. The Cancer Center Medical Staff Conditions of Participation, instituted as part of the NCCCP program, also required physicians to give a percentage of their time to treatment of the uninsured. An American Cancer Society patient resource navigator, whose salary is split between the ACS and the cancer center, assists the private practice offices within the cancer center to help underserved patients link with resources.

To address barriers created by limited transportation resources, particularly for patients in rural areas, the hospital responded by providing two vans and has plans to buy a third – offering free rides to patients as far away as 120 miles for appointments and treatments. Improving access to care is essential, but getting underserved patients on clinical trials required more engagement with primary care physicians, specialists, and community groups through an ongoing campaign.

Barriers to Underserved Accruals

Patient knowledge base

Lack of regular source of medical care/no medical home

Medical staff reluctance to assume liability for patients screened without access to treatment

Fear of job/payment loss – if being on a clinical trial requires time away from work

Transportation, especially for rural patients

Results

The percentage of rural patients accrued to Cooperative Group trials went from 28% to 46% in one year $\,$

Dr. Zaren explained, "I regularly visit primary care physicians (PCPs) in their offices, even those in distant locations, to inform them about open trials and the eligibility criteria." By working closely with the Magnolia Coastal Area Health Education Council, Dr. Zaren launched CEU-based webinars on disparities and clinical trials to educate and engage PCPs.

St. Joseph's/Candler promotes underserved accrual by employing cross-cutting measures to reinforce the topic at every opportunity. Eileen Dimond, NCI Clinical Trials lead for the NCCCP, attributes the site's progress with this difficult area to the hospital's "multi-faceted approach to create a culture for addressing the underserved." Noting that underserved accrual is a standing agenda item at all program, clinical, and staff meetings, Dr. Zaren explained that metrics are continually reviewed to monitor progress. In 2011, 46% (19 of 41) of patients accrued to Cooperative Group trials at St. Joseph's/Candler were from rural locations, compared to 28% (13 of 45) in 2010. "We are very proud of our success," he added, "but we continue to strive for more. To advance cancer treatments for all patients and ensure that the results can be generalized to broader populations, we must all work to ensure that we increase accruals of underserved patients to clinical trials."

Information Technology

Information technology (IT) initiatives are addressing program goals by integrating IT activities across program components to speed the incorporation of NCCCP data collection needs within technology expansion plans at the sites. During the past year, the IT Subcommittee gave special attention to the technical work required to support the disparities and biospecimen activities, and also focused resources on technology expansion to meet the U.S. Department of Health & Human Services "meaningful use" timelines. Key projects to support research expansion include:

- Enabling Race and Ethnicity Data Capture: All sites successfully implemented mandatory system
 configurations that required the collection of race and ethnicity data according to the Office of Management and
 Budget (OMB) guidelines.
- Enhancing Local Data Warehousing: Sites worked collaboratively to define an initial list of community-based
 oncology outcomes data elements mapped to common systems, locally addressing common data integration
 issues. Four sites created or expanded local data warehouses that reflected considerations from this work.
- Improving and Sharing System Documentation: IT representatives worked to improve and share system
 documentation and code, collaborating to share experiences and resources in expansion activities, testing and
 improving local installations of NCI open source solutions to enhance the deployment experience nationally.

Norton Healthcare: Building Information Technology Platforms to Support Research Relationships

"If we want to make research an integral part of the care we offer, we have to be connected to leading research organizations with a vision to think outside of our organization."

-Stephen A. Williams, Norton CEO

The Norton Cancer Institute had already started to invest in cancer research and build connections with the University of Kentucky (UK) when it decided to respond to an RFP for NCCCP selection in 2010. Once it joined the NCCCP network, those relationships were able to expand more rapidly and a combined collaboration with Norton, UK, and Moffitt Cancer Center was formed to enhance biospecimen research opportunities.

"We knew that if we wanted to offer research to our patients we needed to broaden our research infrastructure and connect with regional and national partners. It was important that our IT systems could interface with theirs to facilitate interactions. NCI made the opportunity for technology expansion possible," said Robert Shaw, president of the Norton Cancer Institute.

"As soon as we joined the NCCCP network," said Dr. Sandra Brooks, principal investigator and physician director for the NCCCP site, "we became very engaged with the program's IT pillar. We hired IT expertise to support our cancer center and the needed technology expansion, and we immediately began to explore adoption of the NCI caTissue Suite to support our biospecimen initiatives."

At the same time, the NCI was implementing a new Clinical Data Management System (CDMS) software package - Medidata Rave® - to facilitate the conduct of clinical research throughout the NCI-supported clinical research enterprise. There were spots for 10 organizations to pilot the CDMS project. Pat Jerus, director of IT at Norton Cancer Institute, explained, "Strategically, we appreciated the importance of aligning NCI standards including harmonization efforts in data with discovery partners." Norton is the only community hospital in the NCI pilot adoption group.

Standardization across organizations is very challenging, yet the realization of improved technology capabilities and the interchange of research data is essential for the NCI. Norton has contributed by providing improved installation documentation for mutual caTissue Suite deployments, making it available to any site planning similar installations. They also developed new code after working with several other NCCCP sites to validate the work, and provided the code to the NCI Tissue Knowledge Center. The NCCCP IT pillar lead, Brenda Duggan, acknowledged that "Norton's contributions and leadership provided value to the NCI technology community at large and improved the return on investment for NCI."

Norton continues to explore ways to reduce barriers to cancer research. A current project is underway to work with NCCCP sites to validate documentation that directs the enabling of barcoding technology integration with caTissue Suite for use by the larger NCI academic research community.

"To work interactively with our research partners," explained Pat Jerus, "we needed the impetus to be agile. That required getting clinical staff, management, and our legal team on board to strengthen and standardize technology capabilities so that our patients and the research community would all benefit."

The NCCCP has become a community-based research platform to support a variety of research projects that address NCI priorities and support research across the cancer continuum. The sites are partnering with CNPs to study ways to reduce cancer healthcare disparities, participating in quality of care and survivorship care studies, partnering with organizations for molecular research studies, and collaborating with investigators from NCI's Early Drug Development Program to conduct early phase clinical trials. The network is a resource for other NCI programs and external organizations, with many sites serving as collaborators on investigator-initiated research studies. To view a snapshot of several network level research partnerships, see Table 1.

Table 1: Network Level Research Partnerships

Partner	Overview	Topic
NCI Community Networks Program (CNP)	Partnering with CNPs (9 sites), several for research studies	Reduce cancer health disparities
American Cancer Society	Patient symptom experience and disparities study (14 sites)	Quality of care
Memorial Sloan-Kettering Cancer Center	Validation study of Patient-Reported Outcomes Version of the Common Terminology Criteria for Adverse Events (5 sites)	Quality of life management
University of Maryland, Baltimore	ARRA-funded study on the impact of multidisciplinary care on processes and outcomes of cancer care (16 sites)	Quality of care
Memorial Sloan-Kettering Cancer Center	Study of oncology providers' attitudes towards providing care plans (14 sites)	Survivorship care
The Cancer Genome Atlas	Formal agreements to serve as biospecimen source sites (9 sites)	Cancer genome characterization
Moffitt Total Cancer Care™	Longitudinal observational study (6 sites)	Biospecimen collection for molecular research

Building on Progress

In July 2012, NCI extended program participation for two more years for 21 of the community hospitals. Located in 16 states across the U.S., the sites will continue to support program initiatives. Building on the success achieved by the network to date, these organizations will further strengthen their capacity to conduct cancer research in the community setting.

NCI Community Cancer Centers Program

2012 NCCCP Hospitals



A Look Ahead: NCI Community Programs

In April 2012, NCI launched a formal planning and external consultation process to solicit input on its recommendation to combine the institute's three community-based research networks to create a single network that builds on their strengths. The Community Clinical Oncology Program Network, including Community Clinical Oncology Programs (CCOPs), Minority-based Community Clinical Oncology Programs (MB-CCOPs) and Research Bases, and the NCI Community Cancer Centers Program (NCCCP) will be united to create the NCI Community Oncology Research Program (NCORP). The new program will serve as a community platform with a broad research agenda. Types of research could include: clinical trials, health services research, disparities research, outcomes research, biospecimen collection, cost-effectiveness research, comparative-effectiveness research, diffusion and dissemination research, and behavioral research. NCORP will maintain a focus on cancer healthcare disparities across the cancer continuum. NCI is collecting input from internal and external stakeholders and expects to present the finalized concept to the NCI Board of Scientific Advisors next year, with the intent to make awards in mid-2014. The funding mechanism will be Cooperative Agreements awarded by the NCI.



VCCP Progress Report 2013



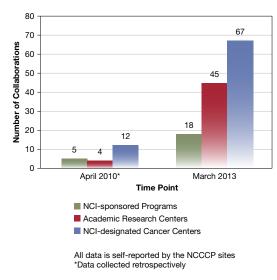
Introduction

Advancing Network Initiatives Increasing Capabilities and Collaborations

The National Cancer Institute Community Cancer Centers Program (NCCCP) entered its seventh year in 2013 and the network of 21 community hospitals continued to address the program's overarching objectives to enhance patient access to high-quality cancer care and to expand research in the community setting. The NCCCP hospitals are making progress in their efforts to achieve program goals (i.e., reduce cancer healthcare disparities, increase clinical trial participation, improve quality of care, enhance survivorship and palliative care programs, support information technology needs, and expand biospecimen collection initiatives) through research partnerships and the maturation of the network's learning collaborative.

To help build a communitybased research platform, the NCCCP has promoted research collaborations as part of the program deliverables. The NCCCP hospitals have demonstrated significant progress by forming new research relationships with National Cancer Institute (NCI)-designated cancer centers, academic research institutions, and other NCIsponsored programs (see Figure 1). In addition to maintaining the overall number of collaborations across the network, the number of sites with two or more collaborations in each partner type increased. All 21 sites now partner with at least one NCI-designated cancer center (see Figure 2), most sites have a collaboration with at least one academic research center, and more than half are also collaborating with at least one NCIsponsored program such as The Cancer Genome Atlas (TCGA) and

Figure 1. Progress on Research Collaborations for 21 NCCCP Sites



Community Networks Program (CNP) centers. A study to assess research collaborations for all NCCCP sites from July 2007 through June 2012 recently concluded and a report to summarize the collaborations and partner types, by network cohort, will be finalized later this year.

The 2013 NCCCP Progress Report highlights activities conducted by the network subcommittee pillars over the past year and describes how many of the initiatives implemented in earlier stages of the program have matured and contributed to progress made toward NCCCP goals.

Figure 2. Examples of Research Collaborations between NCI-designated Cancer Centers and NCCCP Sites

NCI-designated Cancer Center	Collaboration Purpose	Collaboration Benefit
Dana-Farber/Harvard Cancer Center Boston	Clinical research intervention study to determine the effect of an education and support program, and to address gaps in care of young women with breast cancer.	Eight NCCCP sites—Billings Clinic, CHI-Penrose St. Francis, Einstein Healthcare Network, Gundersen Lutheran, Northside Hospital, Norton Suburban, and Our Lady of the Lake—are supporting this research study. Through the process, clinicians and researchers are optimistic that this work may help develop more effective, personalized care, guiding more young women with breast cancer through the challenges of diagnosis, treatment, and long-term survivorship.
The Wistar Institute Philadelphia	Acquisition and experimental use of ovarian cancer tissue, ascites, plasma, and serum	Christiana Care's clinical physicians participate in translational research, providing Wistar with access to patients, clinical information, and biospecimens.
	Translational research, melanoma pathway study	Lehigh Valley Health Network is collecting melanoma tissue for Wistar's study of patients with BRAF gene mutation, and is also actively participating in a phase 2 melanoma trial due to their evolving infrastructure and expertise.
University of Colorado Cancer Center Aurora	Recruitment to clinical trials	Patients from Billings Clinic have access to early- phase clinical trials; The Billings-UCCC collaboration has led to a closer partnership in research and support services.

Disparities

Disparities-focused Program Efforts: Maturation toward Evidence-based Practices

Very few examples of evidence-based practices¹ to address cancer healthcare disparities were in place at the participating sites when the NCCCP launched in 2007. As the program matured and with increased emphasis on more focused approaches, by 2013 all sites implemented at least one disparities-focused, evidence-based practice (EBP) relevant to specific racial, ethnic and underserved populations including under- and uninsured patients.

The use of disparities-focused EBPs is common in academic settings yet not typically a component of community hospital programs; adapting such approaches to community healthcare practice patterns requires time, resources, and new strategies. The ability of the NCCCP sites to successfully implement EBPs can most likely be attributed to the commitment of the sites, their leadership, and the role of the network as a learning collaborative. While all of the NCCCP sites already had basic infrastructures and community outreach programs in place to serve their disparate populations when they joined the network, program participation required an integrated approach to addressing cancer disparities. The NCCCP provided the framework to systematically build capacity through education, data sharing, and focused project planning. As described below, the NCCCP sites worked to increase community partnerships and formalize relationships with research organizations, share best practices, and prioritize work plans using a Disparities Dashboard – ultimately leading to their ability to implement specific interventions.

Building Capacity

From the beginning of the program, the NCI and the NCCCP sites worked together to advance the NCCCP's goal of reducing cancer healthcare disparities. Allocating 40 percent of program funding to disparities helped provide the hospitals with resources needed to support infrastructure development. The NCCCP required metrics to track progress, partnerships with

¹ Programs and/or practices that have demonstrated effectiveness based on different levels of scientific research and evaluation. (National Cancer Institute, *Using What Works: Adapting Evidence-based Programs to Fit Your Needs*, 2006)

relevant community organizations, and the collection of race and ethnicity data according to Office of Management and Budget guidelines. Network participation provided the forum for the hospitals to learn about EBPs, set priorities for addressing disparities in their communities, and support NCI's research mission.

To build on the hospitals' existing activities to reach underserved individuals in their communities, the NCCCP required strategies focused specifically on cancer across the program pillars and across the care continuum. With a significant shift in their approach and levels of resource support, the NCCCP sites worked to establish a cross-cutting infrastructure to address disparities, expanded outreach and screening activities, increased navigation and outreach staff, and launched targeted EBPs (e.g., a breast cancer screening program for Hispanic women) that engaged their communities.

Education

The sites were exposed to best practices from their network peers, educational resources and programs from NCI advisors and other NCI-sponsored programs (e.g., the Center to Reduce Cancer Health Disparities, CNPs), and presentations from external experts on EBPs. Network-wide webinars and NCCCP annual meeting sessions focused on education surrounding EBPs and sharing resources such as NCI's *Using What Works*. The NCCCP sites explored initiatives to apply community-based participatory research methods as a means to promote more effective collaboration with active participation from community members and community groups. Several NCCCP sites took advantage of formal and informal partnerships with CNP organizations and began to participate in evidence-based initiatives (e.g., *Body & Soul*, a research-tested intervention program to promote healthy food choices) and utilize EBPs in their disparities efforts.

Capacity building for targeted disparities initiatives

Education on evidence-based practices

Adopting evidencebased practices

Adoption of Evidence-based Practices

At the August 2012 NCCCP Annual Meeting, each site committed to implementing at least one evidence-based, disparities-focused project for any one of the program pillars. By March 2013, all 21 sites had launched a diverse range of EBPs that integrate the program's disparities goals across program pillars (i.e., 16 initiatives focus on Quality of Care, 2 on Clinical Trials, 1 is on Survivorship, and 2 on Biospecimens). A few examples reported by the sites include:

- Cancer 101 Billings Clinic implemented this cancer education curriculum with seven
 modules to provide culturally appropriate information about prevention, detection,
 treatment, and clinical trials to American Indian tribal community members in Montana
 and the surrounding area. The goal is to improve knowledge and attitudes about cancer,
 improve cancer control and survival rates, and ultimately increase cancer screenings.
 Using pre- and post-test scores, Billings can assess cancer knowledge gained and
 retained from the program based on metrics.
- Cultivando La Salud Huerka Christiana Care uses trained promotoras to encourage
 Hispanic women in a Delaware county to be screened for breast, cervical, and colon
 cancer. Christiana provides promotoras with education and training, assistance with
 one-on-one activities, and partners with healthcare providers for two Federally-qualified
 health centers to increase screenings. Through this practice, Christiana tracks the
 number of women referred, screenings by cancer type, women enrolled in the state's
 Screening for Life program, and women referred to Delaware's Community Healthcare
 Access Program.

• Clinical Trials Education and Awareness — The Queen's Medical Center in Honolulu is working to increase clinical trial accrual among underrepresented populations in Hawaii (i.e., Native Hawaiians, Filipino, Japanese, Chinese, and Pacific Islanders) through the Clinical Trials Education and Awareness program targeted to medical providers and their staff. Based on an evidence-based training curriculum, the program provides tailored presentations and educational materials to promote cancer clinical trials and educate medical professionals about their influence on patients' decisions to enroll in trials. Preand post-tests help measure staff/providers' confidence levels in discussing clinical trials with patients diagnosed with cancer, and three-month post-presentation follow-up calls assess whether the providers are engaging in discussions about cancer clinical trials with their patients. Clinic records are reviewed to track the frequency of physician referrals and number of patients who report that their provider mentioned a clinical trial.

With the implementation of these evidence-based programs, NCCCP sites have demonstrated that they understand the value of advancing efforts to address cancer healthcare disparities and that they are committed to using effective strategies to reach, educate, and improve outcomes for diverse racial, ethnic, and underserved populations. As these efforts have matured and research collaborations have increased, the NCCCP sites are able to better document their services, use data derived from EBPs to meet the health needs of their communities, and contribute to cancer disparities research.

Clinical Trials

Leveraging Program-developed Tools to Inform Community Practices

With a goal to expand access to clinical research in the community setting, the NCCCP required standardized data reporting methods and established common working practices among the network of diverse community cancer centers. The hospitals have been using data-tracking logs and matrices developed by the NCCCP to help monitor progress and assess barriers to clinical trial participation, with a focus on increasing accrual rates for populations typically underrepresented (e.g., racial and ethnic minorities, elderly) in cancer trials. Lessons learned through sharing best practices among network sites, modifying tools based on program needs, and strategically addressing barriers related to trial enrollment have contributed to the hospitals' ability to report progress on enhancing research infrastructures, and capturing screening efforts for patients considering clinical trials.

The NCCCP Clinical Trials Best Practice Matrix

The NCCCP hospitals used the network-developed Clinical Trials Best Practices Matrix to assess their local clinical trials infrastructure. Established by the Infrastructure Working Group, the matrix was derived from a publication that outlined seven exemplary attributes for strong clinical trials program development.² NCCCP hospitals completed two rounds of infrastructure self-assessments in 2011 and 2012, using the matrix as a benchmarking tool to create a roadmap for improving the quality of clinical research performed at their locations. The tool is now being revised and expanded for use in the broader community, beyond NCCCP. A formative evaluation through cognitive interviews and stakeholder feedback is underway, helping to shape the tool and improve its relevance and utility in the community. Building on the NCCCP's initial work, the Clinical Trials Best Practice Matrix will be leveraged for future NCI community programs.

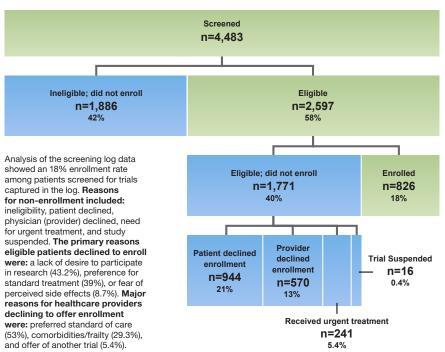
Clinical Trials Subcommittee Efforts

The following represents a culmination of projects initiated early in the program by three Clinical Trials Subcommittee working groups, made up of NCCCP site staff with oversight from NCI program advisors. These groups saw significant accomplishments during the past year as efforts matured over the course of the program.

² Zon, R., Meropol, N.J., Catalano, R.B., Schilsky, R.L., American Society of Clinical Oncology Statement on Minimum Standards and Exemplary Attributes of Clinical Trial Studies, Journal of Clinical Oncology, 2008

Clinical Trials Screening and Accrual Log. The NCCCP Clinical Trials Screening and Accrual Log was officially launched in 2009 as an online data collection tool to track trial-specific screening and accrual data and document enrollment barriers, thereby providing network hospitals with a way to monitor progress and identify strategies to improve recruitment. Over the course of the program, the tool was modified to improve functionality and to allow sites to review data in real-time — enhancing the log's utility and providing a method to screen patients for selected NCI treatment and cancer control and prevention trials (primarily phase 3). Once a significant number of records were entered in the log to enable an informative analysis, the outcomes of nearly 4,500 screened patients were reviewed (see Figure 3). The working group is compiling lessons learned from the log data analysis and site input on utility to help plan for use of a similar tool in future NCI community programs. Two manuscripts on analysis of the log data were submitted for peer review in late summer 2013.

Figure 3. Summary of the screening outcomes of patients entered into the NCCCP Clinical Trials Screening and Accrual Log



Early-Phase Clinical Trials. To help NCCCP hospitals expand research efforts to support the conduct of early-phase (i.e., phase 1 and 2) cancer clinical trials, the Early Phase Clinical Trials Working Group completed a baseline assessment of the infrastructure characteristics associated with the NCCCP hospitals that are successfully accruing patients to early-phase trials. In addition, the program continued to encourage NCCCP hospitals to expand collaborations with the NCI-designated cancer centers, academia, and industry to engage in early-phase trial activation at their sites. The *Journal of Oncology Practice* published a paper in December 2012 that describes the working group's efforts (see Figure 4, page 12).

Underserved Accrual. Over the past year, the Underserved Accrual Working Group narrowed its focus from three areas (i.e., physician and community outreach related to clinical trials, translation issues, and clinical trials research team coordination with patient navigators) to concentrate on clinical trials-navigation collaboration metrics and data. This working group connected with the NCCCP Navigation Networking Working Group for education and collaboration in this area. Using the NCCCP's Quarterly Report mechanism, all 21 sites submit data for ongoing, active analysis. The reports help to create uniformity and accountability by improving awareness and tracking changes over time. Based on the maturation of data and working group efforts, several manuscripts are in the initial planning phase. The papers intend to share information with the broader cancer care and research community by publishing:

- A summary of the wide range of efforts and lessons learned during NCCCP's process to create a culture of clinical trials in the community setting, focusing on strategies for accrual, particularly for underrepresented populations;
- A description of the NCCCP Clinical Trials Navigation Project and associated experiences/lessons learned from the group of participating sites; and
- A description of network strategies to address accrual rates³ for underrepresented populations focused on clinical trial - navigation collaborations, data collection methods, and assessment metrics that may inform future cancer research studies.

Quality of Care

Expanding Multidisciplinary Care and Continuing Collaborations for Research and Quality

A major objective of the NCCCP is to improve the quality of cancer care delivered to patients at the network's hospital-based community cancer centers. From the outset of the program, the NCCCP has consistently focused on the expansion of multidisciplinary care models and participation in national quality reporting initiatives to advance this goal. In early 2012, each NCCCP site committed to assessing their multidisciplinary care conferences/clinics (MDC) to develop performance improvement plans for sustaining or expanding existing multi-modality treatment practices — most sites worked to add at least one new, cancer-type specific MDC conference/clinic. Additionally, continued network participation in the American College of Surgeons Commission on Cancer (CoC) Rapid Quality Reporting System (RQRS) and American Society of Clinical Oncology (ASCO) Quality Oncology Practice Initiative (QOPI®) is helping NCCCP sites achieve program quality of care goals.

Maturing MDC Conferences/Clinics

The multidisciplinary approach to cancer care involves a team structure with several medical disciplines collaborating to prospectively coordinate patient care; the NCI has a long history of supporting the development and diffusion of MDC models.⁴ As a cornerstone of the NCCCP Quality of Care Subcommittee, multidisciplinary care has been the focus of several network-level activities to help sites develop and assess their MDC structures and level of treatment team integration—contributing to the evolution and maturation of MDC committees and clinics at the participating hospitals. Accomplishments include:

- More than 180 MDCs are operational across the 21 sites, including several for hematologic, melanoma, gynecological/ovarian, thyroid and rectal cancers.
- A cohort of 14 sites used the NCCCP-developed MDC Assessment Tool on three
 occasions between 2010 and 2012 to assess MDC maturity levels and set improvement
 goals. The tool ranks nine elements relevant to MDC structure and operations on a

³ Accrual rate = the number of enrolled patients over the number screened per hospital.

⁴ Fennell, M.L., Prabhu Das, I., Clauser, S., Petrelli, N., Salner, A., *The Organization of Multidisciplinary Care Teams: Modeling Internal and External Influences on Cancer Care Quality*, J Natl Cancer Inst Monogr 2010;40:72–80

scale of 1 to 5 (level 1 = retrospective case review and qualifies as a tumor board or cancer conference, level 5 = highly integrated MDC) for lung, breast, and colorectal cancers. Analysis found MDC improvement was most evident in the following areas: prospective case planning, physician engagement, treatment team integration, patient evaluation for clinical trial participation, and quality improvement. These gains may be attributed to greater integration of primary care providers and patient navigators in MDCs, better defined conditions of participation by participating physicians, increased site participation in quality improvement initiatives, and an NCCCP project aimed at increasing referrals to genetic counseling for patients with breast and colon cancer.

 The NCCCP Quality of Care Subcommittee co-chair from Lehigh Valley Health Network delivered a podium presentation at the ASCO Quality Care Symposium in December 2012 describing the NCCCP's experience with MDCs.

Research Collaborations within the Network

Collaborations with the CoC provide the network with opportunities to participate in research studies related to MDC and the piloting of new registry-based platforms for collecting patient-reported outcomes. RQRS data has been a significant component for identifying cases and evaluating outcomes for the network's research projects:

- Seventeen NCCCP sites collaborated with the American Cancer Society (ACS) and the
 CoC on the Patient Reported Outcomes Symptom and Side Effects Study (PROSSES)
 that piloted a cost-effective method for collecting patient-reported data on cancer
 symptoms and investigating disparities in the burden of patients' symptoms and how
 they are managed. The NCCCP sites met the study's accrual goal and efficiently
 recruited more than 2,500 breast and colon cancer patients with an overall survey
 response rate of nearly 60 percent. ACS expects to begin data analysis in fall 2013 and
 intends to disseminate findings in the future.
- Since 2010, 14 NCCCP sites have participated in a study designed to examine the
 relationship between MDC and selected processes and outcomes, primarily using
 patient data collected from the sites in addition to cancer registry data from RQRS.
 The study closed in December 2012 with more than 1,000 cases accrued. Through
 collaboration with a core research team from the University of Maryland, data analysis
 is underway with plans to present preliminary findings at the Association of Community
 Cancer Centers' national conference in October 2013.

National Quality Reporting Initiatives

Participation in national quality reporting initiatives such as RQRS and QOPI continues to be a focus for the Quality of Care Subcommittee. As of spring 2013, 19 NCCCP hospitals with 29 affiliated practices are participating in ASCO's QOPI program — an oncology practice-based data sharing initiative to help improve cancer care through self-measurement, feedback and improvement tools. Ten of the affiliated practices have achieved QOPI certification. Additionally, after ASCO and the Oncology Nursing Society published standards for oral chemotherapy administration in February 2013, several NCCCP-affiliated practices voluntarily began to participate in QOPI's oral chemotherapy test measures for each data collection round and the network sites have given presentations to the Quality of Care Subcommittee related to this topic. ASCO quality staff presented an educational webinar to the NCCCP hospitals and continue to collaborate with the network to identify barriers to implementation of the standards.

RQRS became available to CoC-accredited cancer programs nationwide in 2011 and nearly all NCCCP sites have either begun to utilize or are working toward implementation of this reporting system to promote evidenced-based cancer care at local levels. RQRS tracks patients in real clinical time, provides follow-up care prompts, and shares performance rates and comparisons on quality measures with participating programs—a feedback mechanism that helps cancer

centers monitor quality and adherence to cancer care standards. The NCCCP network—with required program deliverables to work toward implementation of RQRS reporting and a Quality of Care Subcommittee focused on movement in this direction—is making significant progress in its goal to improve cancer care at community hospitals.

Survivorship and Palliative Care

Implementing Research Findings in the Clinical Setting

During the past year, NCCCP sites continued to expand cancer survivorship and palliative care services and addressed implementation of cancer program standards that will be assessed by the CoC in 2015. Of significant note, the sites have been exploring and incorporating early palliative care (PC) consultation protocols related to high lethality cancers (e.g., pancreatic, metastatic lung) based on research findings that suggest early palliative care for patients with metastatic non-small-cell lung cancer improves both quality and length of life. Twelve of the sites report that protocols are in place for early PC intervention for one or more high lethality cancers. Additionally, the sites are including research evaluations, approved by their local institutional review boards, to examine patient and quality outcomes.

Later this year, sites will use the NCCCP Cancer Palliative Care Assessment Tool to assess their progress with integrating PC services into their cancer programs and providing early consultation for patients diagnosed with selected high-lethality cancer types. Examples of PC initiatives at the NCCCP hospitals include:

- Gundersen Lutheran in La Crosse, Wisconsin received national recognition for its
 evidence-based program Respecting Choices, a disease specific, patient-centered
 approach to advance care planning.
- Mercy Medical Center of Des Moines has three distinct programs that support PC services that are fully incorporated across the cancer center. Additionally, PC program staff conduct educational sessions for clinical staff at rural hospitals and regional nursing homes, and serve in leadership positions to provide education support for the state's Hospice and Palliative Care Association.

Partnering for Research

Through network involvement, 14 NCCCP hospitals collaborated with an NCI-supported investigator to serve as recruitment sites for a research study to survey oncology providers about their attitudes toward providing survivorship care plans to cancer patients. Access to the NCCCP's research platform allowed the Memorial Sloan-Kettering Cancer Center investigator to obtain data from a geographically diverse sample of community-based care providers and helped to achieve an impressive survey response rate of over 70 percent. Study results have been submitted for publication; several NCCCP principal investigators are co-authors on the manuscript.

Implementing Psychosocial Care for Cancer Patients: Sharing Best Practices

All NCCCP sites are working to improve psychosocial care initiatives and are using the NCCCP Psychosocial Care Assessment Tool Modeled for Whole-Person Care to assess their programs, drive planning priorities, and improve the percentage of patients screened for psychosocial distress using standardized tools. Through the network, sites have shared both successes and challenges and have adopted an informal mentoring program by pairing participating hospitals with evolving programs with those having established programs to help improve and/or expand psychosocial care initiatives. Examples of these efforts include:

⁵ Temel J.S., Greer J.A., Muzikansky A., et al. *Early Palliative Care for Patients with Metastatic Non-Small-Cell Lung Cancer,* The New England Journal of Medicine (2010)

⁶ NCCCP Progress Report 2012, http://ncccp.cancer.gov/files/2012_Prog_Report_508compR1_20130227.pdf

- As part of their goal to implement distress screening, Hartford Hospital in Connecticut
 developed and is piloting an electronic distress screening instrument. Hartford chose an
 electronic format to provide real-time feedback to providers that they can discuss with
 patients. This allows the ability to detect and monitor patient distress levels over time,
 as well as follow up on response to patient referrals and interventions.
- Christiana Care in Delaware uses a patient-centered, relationship-driven approach to survivorship care and is expanding psychosocial services through surveys of patient symptoms and concerns, as well as ongoing evaluation of literature findings. Based on their findings, Christiana focuses on individualized interventions within the context of the provider/survivor relationship, addressing survivor concerns and providing education and screening.

Treatment Summaries and Survivorship Care Plans

The Treatment Summary Working Group collaborated with the Information Technology (IT) and Quality of Care Subcommittees to advance network sites' efforts to provide patients with treatment summaries and incorporate survivorship care plans into the model of care for at least one cancer disease type (e.g., breast, colon). The chair of the Quality of Care Subcommittee joined the Survivorship and Palliative Care Subcommittee to discuss ways to improve QOPI scores related to this activity and obstacles to implementation of treatment summaries. Lessons learned from NCCCP participation are also shared with other cancer centers. For example, Catholic Health Initiatives (CHI) is using NCCCP best practices across the CHI oncology service line so that all CHI system hospitals are using this information to work toward their goals. Read more about ways the NCCCP sites are working to provide patients with treatment summaries and survivorship care plans in the IT section of this report.

Information Technology

Integrating Information Technology across Program Pillars

Given the important role of IT in supporting all NCCCP activities, the IT Subcommittee became a cross-cutting pillar in 2012 rather than a stand-alone pillar with its own IT projects. Through this integration, the various NCCCP subcommittee co-chairs and principal investigators work directly with IT leads and NCI technical advisors to address key data sharing and system support needs across all pillars. The IT Subcommittee developed both short- and long-term strategies to support technology expansion initiatives, including:

- Collaborate with vendors to incorporate NCCCP data requirements. All NCCCP sites worked with IT vendors to conform definitions and add fields that enable sites to uniformly capture program-required data, such as patient race and ethnicity data according to OMB guidelines. Several sites worked with electronic health record (EHR) vendors to develop oncology modules for their products. Through this collaboration, input from the NCCCP sites influenced product development decisions and contributed to the addition of patient navigator tools and treatment summaries, creating modules that will serve the vendors' entire oncology customer base.
- Improve data capture to identify healthcare disparities. To improve community
 outreach, several sites targeting rural populations for their disparities efforts enabled
 Rural-Urban Community Area (RUCA) code algorithms to help identify rural populations.
 Additionally, IT support enabled sites to electronically match patient age and health
 insurance status, creating a mechanism to improve outreach services to elderly and
 under- or uninsured patients. Most sites have enlisted their NCCCP IT representatives to
 assist in identifying patients who require post-treatment surveillance and monitoring as
 part of survivorship care.

• Support electronic capture and dissemination of treatment summaries and survivorship care plans. All sites have in place or are soon to deploy either electronic or paper-based patient treatment summaries and care plans. In addition, a portion of cancer patients at all sites receive survivorship care plans, yet many sites still struggle to find efficient electronic solutions, slowing progress toward the goal of providing both survivorship care plans and treatment summaries to all cancer patients. To advance this effort, the sites continue to work with IT vendors and share their best practices and success stories among the network. For example, Lehigh Valley Health Network in Pennsylvania presented to the Survivorship and Palliative Care Subcommittee a template they developed with an electronic medical records (EMR) vendor that populates from treatment summaries into their survivorship care plans — allowing sites that use the same EMR system to explore a similar solution and enhance electronic data exchange with providers.

Through extensive collaboration within the network, dedicated leadership support, and mutual vendor collaboration, sites have been able to more rapidly improve targeted technology expansion to better support providers and patients at the NCCCP sites.

Biospecimens

Promoting Biospecimen Collection Efforts

The limited availability of standardized, high-quality biospecimens is recognized as a barrier to progress in cancer research. A goal of the NCCCP has been to enhance the sites' ability to collect, process and store biospecimens from a diverse cohort of patients to contribute to NCI's research mission and advance the understanding of cancer at a molecular level. The NCI Best Practices for Biospecimen Resources defines state-of-the-art practices, promotes specimen and data quality, and supports adherence to ethical and legal requirements in this area. Over the past year, NCCCP sites continued to work toward implementation of these guidelines with 2 sites reporting full compliance and 13 sites reporting considerable progress.

The sites are increasingly recognized by external organizations as valuable research partners for their ability to contribute high-quality biospecimens to research studies. With the scientific community's increased focus on cancer genomics and molecular medicine to advance cancer treatment options, programs such as NCl's TCGA and research studies at organizations such as Moffitt Total Cancer Center™ in Florida are able to improve molecular research as the pool of specimens and clinical data increases. Examples of biospecimen initiatives reported by the NCCCP sites include:

- Ten sites have formal agreements to participate in TCGA;
- Several sites have established local biospecimen banks and an increased number of sites are leveraging regional biobanking services;
- Sixteen sites use standard operating procedures for the culturally- and religiouslysensitive disposal of biospecimens, especially among American Indian/Native American communities; and
- Twenty sites record formalin fixation time in pathology reports and 11 sites document
 cold ischemia time for breast cancer specimens in pathology reports. Though most
 pathologists manually calculate these times, the NCCCP Biospecimen Subcommittee
 is collaborating with the College of American Pathologists (CAP) and other professional
 organizations to add this requirement to national certification requirements. Sites are
 also working with vendors to add fields and build algorithms to improve documentation
 methods to enable addition of system-generated times to all pathology reports when
 specimens are collected.

Throughout the year, expert speakers brought timely topics to the network to bring the latest science and best practices on biospecimen collection to community providers. The Biospecimen Subcommittee continues to support the network as progress continues toward more sites implementing *NCI Best Practices* and enhancing cancer research initiatives.

Communications

Communicating the Value of Research-based Cancer Care

Communications representatives at each NCCCP site continued to support their cancer center's NCCCP pillar activities by promoting cancer screening events to help reduce healthcare disparities, educating patients about clinical trials, and reaching out to local physicians to encourage patient referrals.

As a group, the Communications Subcommittee focused on a challenge that emerged from the 2012 NCCCP Annual Meeting: to shift NCCCP messages away from pillar-related attributes to a broader theme of "NCI in Your Community," espousing the value of research-based cancer care and the sites' affiliation with NCI and the National Institutes of Health. The subcommittee responded by modifying language to this effect on their websites, updating network-wide talking points and materials, and publishing articles in local news media — all with the goal of equating a cancer center that conducts or supports cancer research with quality cancer care in the minds of patients, hospital staffs, and local healthcare providers. In fall 2012, the Communications Subcommittee drafted and shared with the network a white paper highlighting lessons learned in communicating the community message, as well as support for the NCCCP program goals. Examples of communications support include:

- The communications team at Mary Bird Perkins Our Lady of the Lake Cancer
 Center in Baton Rouge uses the Template for Community Outreach developed by
 the Disparities Subcommittee to increase attendance and cancer screenings at its
 flagship Fest for Life minority cancer awareness event.
- CHI's Nebraska sites, which include Good Samaritan Hospital in Kearney, Saint Francis Cancer Treatment Center in Grand Island, and Saint Elizabeth Cancer Institute in Lincoln, created an interactive website that enables patients for the first time to search for clinical trials by trial name, tumor site, hospital name and disease stage.
- St. Joseph Health in Orange, California produced a video featuring its NCCCP principal investigators describing their team approach to coordinated cancer care, access to clinical trials, nurse navigators and physicians who are connected nationally—all results of a program that has matured to impact the health of the community served by the hospital.

Conclusion

Many activities initiated in the early years of the program led to research partnerships and community connections that are improving the delivery of cancer care and benefitting patients. Through collaborations among the network sites, strengthened partnerships with NCI-sponsored research programs, and relationships with national cancer organizations, the NCCCP hospitals have expanded their ability to conduct a broad range of research initiatives, provided patients with greater access to research opportunities, and demonstrated their commitment to improving the quality of care delivered to cancer patients. This report not only reflects the work of the NCCCP sites and the NCI over the past year, it also represents a culmination of activities since the NCCCP launched as a pilot program in 2007, many of which were made possible through collaborations... showing that "the whole is greater than the sum of the parts."

Sharing Lessons Learned through Publications

NCCCP colleagues continue to publish articles and present findings at national conferences. A list of NCCCP-related publications can be found at http://ncccp.cancer.gov/news-publications/index.htm. A table of peer-reviewed articles, published over the past year, is included below.

Figure 4. Recent Publications

Title	Authors	Journal
The Role of a Public-Private Partnership: Translating Science to Improve Cancer Care in the Community	D.M. O'Brien and A.D. Kaluzny	Journal of Healthcare Management (in press)
Improving Quality of Cancer Care at Community Hospitals: Impact of the NCCCP Pilot	M. Halpern, P. Spain, D. Holden, A. Stewart, E. McNamara, G. Gay, I. Prabhu Das, and S. Clauser	Journal of Oncology Practice August 2013
Mobile Mammography in Underserved Populations: Analysis of Outcomes of 3,923 Women	S.E. Brooks, T.M. Hembree, B.J. Shelton, S.C. Beache, G. Aschbacher, P.H. Schervish, and M.B. Dignan	Journal of Community Health May 2013
The Cancer Psychosocial Care Matrix: A Community- derived Evaluative Tool for Designing Quality Psycho- social Cancer Care Delivery	L.P. Forsythe, J.H. Rowland, L. Padgett, K. Blaseg, S.D. Siegel, C.M. Dingman, and T. A. Gillis	Psycho-Oncology February 2013
Early-Phase Clinical Trials in the Community: Results from the National Cancer Institute Community Cancer Centers Program Early-Phase Working Group Baseline Assessment	H.A. Zaren, S. Nair, R.S. Go, R.A. Enos, K.S. Lanier, M.A. Thompson, J. Zhao, D.L. Fleming, J.C. Leighton, T.E. Gribbin, D.M.Bryant, A. Carrigan, J.C. Corpening, K.A. Csapo, E.P. Dimond, C. Ellison, M.M. Gonzalez, J.L. Harr, K. Wilkinson, and A.M. Denicoff	Journal of Oncology Practice December 2012
Developing Partnerships and Recruiting Dyads for a Prostate Cancer Informed Decision Making Program: Lessons Learned from a Community-Academic-Clinical Team	D.B. Friedman, K.M. Johnson, O.L. Owens, T.L. Thomas, D.S. Dawkins, L. Gansauer, S. Bartlett, N.M. Waddell, P.J. Talley, J.D. Bearden, and J.R. Hébert	Journal of Cancer Education June 2012

A Look Ahead

Over the coming year, NCCCP sites will continue to address program goals to enhance access, improve quality, and expand research in the community setting. Though the program is scheduled to end in June 2014, the NCI Board of Scientific Advisors recently approved creation of a new community oncology program that will replace the Institute's existing community-based programs. The NCI Community Oncology Research Program (NCORP) will integrate elements from the NCCCP with the Community Clinical Oncology Program (CCOP), including its Minority-Based CCOPs, expanding on the strengths and successes of both networks and creating a new network for cancer care delivery research.





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